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ond-class matter.]

BALTIMORE, MARCH 17, 1910.

Bart Moore of Moore & Moore, real-estate agents of Waco, Texas, writing under date of February 22, says:

After reading the MANUFACTURERS' RECORD for 12 years I am convinced that, like pure wine, it improves with age, each issue being a decided improvement over previous issues, brimful of news and of vast interest to all readers and of special value to every business interest in the Southern States.

INCREASING ACTIVITY IN MINERAL DEVELOPMENTS.

The International Harvester Co. of Chicago, through its subsidiary, the Wisconsin Steel Co., is planning for the immediate development of a 20,000-acre tract of coal land in Harlan county, Kentucky, which was purchased several years ago. A special dispatch to the MANUFACTURERS' RECORD gives some of the details, including the opening of mines, which will be equipped for a daily output of 2000 tons of coal, and the construction of 300 coke ovens, with a daily capacity of 600 tons. The improvements now planned will cost about \$500,000.

This is but another indication of the trend of capital for industrial development Southward. Eastern Kentucky is rapidly coming to the front in this particular. That section, long almost dormant in comparison with its great wealth of coking coal, promises now to be in the near future a center of activity which will bring about wonderful changes in a great region heretofore but slightly affected by the industrial progress of the day.

One by one the great iron and steel-making companies of the country will have to follow the example of the In-

ternational Harvester Co., and look to the South for their coke, and sooner or later many of them will have to look to the South for an adequate supply of iron ore. Just as coal lands in West Virginia have been steadily advancing until recently \$350 an acre was refused for a 10,000-acre tract in that State, so coal lands in Kentucky and Tennessee and Alabama are steadily advancing in value. When it is remembered that good coal lands in Pennsylvania command, if in the Connellsville region, as high as \$3000 an acre, it can be readily seen what a great advance must take place in any exceptionally good coking-coal properties in the South.

Iron-ore lands are likewise becoming more and more valuable, and advices from Alabama show a steadily rising value for iron-ore properties, and a steady increase in the royalties that are being paid on ores.

As in mineral lands, so in lumber properties, in water-powers, in agricultural lands, there is everywhere an upward tendency. The outlook in every direction is exceedingly promising.

ONE WAY TO DEVELOP THE SOUTH.

Mr. Wm. B. Reilly, president of The Reilly-Taylor Company, coffee importers and roasters, of New Orleans, writing to the MANUFACTURERS' RECORD under date of March 3, stated that in order to show the appreciation of the company "of your most splendid work for our Southern country," he proposed to have forty traveling men representing his house interest themselves in inducing their customers to subscribe for the MANUFACTURERS' RECORD, and added:

We will use our efforts to induce each one of our men to secure for you at least one new subscriber. It is our purpose to say to each of our men to ask those who subscribe to promise to read the RECORD carefully, and to tell them if they don't feel at the end of twelve months they have not received \$4 worth to draw on me for the amount.

As this was the first knowledge that the MANUFACTURERS' RECORD had ever had that Mr. Reilly or his company was particularly interested in the work of the MANUFACTURERS' RECORD, our New Orleans manager was asked to see him in regard to his plan. To him Mr. Reilly said that while he desired in this way to pay tribute to the work of the MANUFACTURERS' RECORD, he wanted it understood at the same time that he was doing this likewise from a selfish motive. He said that he knew that every dollar that the MANUFACTURERS' RECORD helps to bring into the South, and every man it induces to locate there, means more business for him. And to this he added, that if the people of the South knew the value of advertising as he knows it, the MANUFACTURERS' RECORD could not hold the advertising matter that would be sent to it. As he is spending several thousand dollars a month in advertising, he knows whereof he speaks.

Taking the thought suggested by Mr.

Reilly and the method which he has adopted of having his forty traveling men make a business of interesting every customer in reading the MANUFACTURERS' RECORD, we may be pardoned for saying that thousands of people throughout the South have expressed similar sentiments as to the value of the work of this paper in quickening the thought and business life of this section, in acquainting its own people with the extent and variety of its resources and the limitless opportunities for business expansion. Thousands have said that it has been to them an inspiration.

We are constantly receiving evidence of the fact that the work which it has done and which it is doing in making the attractions and resources of the South known is resulting in turning the tide of population and of capital Southward.

Accepting the testimony of thousands of people, North and South, of the newspapers of every section, of Governors and Congressmen and public men generally, who bear witness to the great value of the work of the MANUFACTURERS' RECORD, the Southern man or the business concern which actively undertakes such a campaign as that of The Reilly-Taylor Company to increase its usefulness by inducing every man with whom he comes in contact to subscribe for it and to study it, will materially help to rapidly hasten the day when Southern prosperity will grow much more rapidly than it has yet grown. As a New York capitalist wrote us a year ago, "the South is sleeping on billions of value." These billions are undeveloped resources, valueless to their owners and to the South until utilized. The work of the MANUFACTURERS' RECORD is to make a living reality, to make tangible wealth out of these undeveloped billions now hid away in unutilized or badly-cultivated land, in unworked coal and ore properties, in now-idle water-powers and in the thousand and one things the development of which will mightily add to the riches of the South. As Mr. Reilly sees it, every new settler brought into the South, every man made by financial success a larger buyer of supplies of every kind, every acre of land made more productive by better tillage, every new mine opened, every new gas or oil well brought into operation, every mill built—everything, in fact, that makes for the expansion of productive and consuming power, broadening the field of work for the people of the South, necessarily broadens the opportunity for every business man, whatever may be his occupation.

ECONOMICS.

Vast possibilities of far-reaching portent are suggested in the following dispatch from Pawhuska, Okla.:

Natural gas has been put to an entirely new use. By means of the pipe lines many herds of cattle in the pastures of the Osage country were saved from freezing to death during the recent blizzard. The herd owners tapped the natural-gas pipe lines of that section and ignited the escaping gas. The com-

fort of the animals, however, was at the expense of citizens of towns depending on natural gas for heating. Shortage of gas caused much suffering among the people.

If this thing ever happened, the cattle-raisers were evidently groping toward the exercise of the right of eminent domain enjoyed by railroads, telegraph companies and other corporations, the right under which railroads may seize coal to whomsoever belonging or the telegraph company may plant its pole on anybody's front pavement regardless of consequences to anybody. Indeed, if the cattle-raisers along the natural-gas pipe lines be given long enough time to think about it, they may be able to formulate a theory that in tapping the pipe lines to warm their cattle they were really national philanthropists, inasmuch as that, if they had not done so, thousands of cattle would have frozen to death—would have gone into natural cold storage—and that thereby the price of beef would have been just so much more increased. The unfortunate point, however, about such a theory is that the natural gas interests might apply it to themselves. They might, for instance, argue that in order to supply natural gas to the people at the lowest possible rates, all expenses should be reduced to the minimum and, as a means to that end, beef should be supplied free to their employes, and, therefore, that the cattle along the pipe line should be killed ad libitum. But why develop other theories?

ANXIETY OF THE COUNTRY'S MATERIAL INTERESTS.

It is difficult to recall a more startling sidelight upon the state of mind of the people of the country toward the Federal Government than that thrown by the extraordinary proclamation of the President of the United States, earnestly urging all persons to answer promptly, completely and accurately all inquiries addressed to them by the enumerators or other employees of the Census Bureau. It suggests clearly that the people fear any form of investigation by the Federal Government to an extent never heretofore apparent in connection with the Census. It is unfortunate that such is the case, and it is hoped that this backing of the Census Bureau's efforts by the President may remove all sense of dread and contribute to the success of the Census. The situation, however, is so significant that it demands some comment. In his proclamation, President Taft says that it is of the utmost importance to the interests of all the people of the United States that this Census should be a complete and accurate report of the population and resources of the country, and he adds:

Now, therefore, I, William Howard Taft, President of the United States of America, do hereby declare and make known that, under the act aforesaid, it is the duty of every person to answer all questions on the census schedules applying to him and the family to which he belongs, and to the farm occupied by him or his family, and that any adult refusing to do so is subject to penalty. The sole purpose of the census is to secure

general statistical information regarding the population and resources of the country, and replies are required from individuals only in order to permit the compilation of such general statistics. The census has nothing to do with taxation, with army or jury service, with the compulsion of school attendance, with the regulation of immigration, or with the enforcement of any national, State or local law or ordinance, nor can any person be harmed in any way by furnishing the information required. There need be no fear that any disclosure will be made regarding any individual person or his affairs. For the due protection of the rights and interests of the persons furnishing information, every employee of the Census Bureau is prohibited, under heavy penalty, from disclosing any information which may thus come to his knowledge.

This is not the first intimation that the Census Bureau is facing exceptional, if not absolutely new, obstacles in its 1910 task. The message of the President is really a condensation of an official statement by Director E. Dana Durand of the Census Bureau, in which he says:

The information sought will be used solely for general statistical purposes. It will neither be published nor used in any other way to disclose facts regarding any individual or enterprise.

The Census is not, never has been, and cannot be employed to obtain information that can be used in any way in the assessment of property for purposes of taxation or the collection of taxes, national, State or local; for deportation proceedings; extradition measures; Army or Navy; conscription; compulsory school attendance; child-labor law prosecutions; quarantine regulations, or in any way to affect the life, liberty or property of any person.

Less than two months ago Director Durand felt moved to announce that extraordinary precautions had been taken to assure manufacturers of the country that all answers to Census inquiries would be held in absolute confidence. He said that the intent of the law is to prevent the disclosure of information which might operate to the detriment in any way of the person or establishment supplying it, and that the special agents are required to explain that the information will not be disclosed to any other bureau of the Federal Government.

Director Durand is most earnest in his conviction that the intent of the Census law will be strictly carried out. But the trouble seems to be, judging from his statement and from the Presidential proclamation, that such assurances are not carrying conviction to the minds of the people of the country. That is not any reflection upon the integrity of the President, of the Director of the Census or of any employee of the Census.

But what if the turn of the political wheel within the next two or three years should place in the Presidency of the United States some individual to whom law is irksome, who would take short cuts to his end, regardless of the law or the Constitution; who would keep the country on the anxious bench, while he seeks to justify through divers investigations theories temporarily assumed by him, and whose quick response to criticism is an assault upon the personal honor of the critic? Such a thing has happened within less than a century. The business interests have not forgotten it.

They are naturally in dread of the possibility of a repetition of it. Hence the necessity for a Presidential proclamation.

It is announced officially that the sole purpose of the Census is to secure general statistical information regarding the population and resources of the country, and that it has nothing to do with taxation, with army or jury service, with the compulsion of school at-

tendance, with the regulation of immigration or with the enforcement of any National, State or local law or ordinance. The general schedule of manufactures indicates that the purpose of the Census is not being adhered to. For instance, general statistics need not include the number of stockholders in a manufacturing establishment that is incorporated. General statistics need not be concerned with the number of days in which the plant is in operation during the year and the number of hours in which the wage-earners normally work. General statistics that have nothing to do with the enforcement of any National, State or local law ought to have nothing to do with the question of the age of wage-earners. General statistics having nothing to do with taxation should stop at a total for miscellaneous expenses, and should have nothing to do with internal revenue or other taxes, with the rent of machinery, royalties, use of patents, insurance, advertising, etc. But such items are included in the schedule which manufacturers are urged to fill out, "subject to penalty."

Again, Director Durand is probably unaware that the information collected by the Census has been employed to promote agitations for National legislation on divers sociological lines directly affecting the liberty of individuals. Information supplied by a particular individual or establishment may never be used as a basis of Governmental action from another direction against that individual or establishment. But in view of the pressure for legislation giving the Federal Government authority to possess itself of most detailed facts about the businesses of the country and the enormous power over individual liberty inherent in such authority, and in view of the use, in divers agitations looking to improper Federal legislation, of information gathered under Government auspices, is it surprising that substantial interests of the country should not be enthusiastic in supporting efforts to obtain information for the Government?

It may be too late to change the form of the Census schedules, but the MANUFACTURERS' RECORD believes that the Government may readily inform the people of the country that they need not give attention to many of the details in the schedules not essential to securing general statistical information regarding the population and resources of the country, which ought to be the sole proper purpose of the Census. Such amendment of the schedules would undoubtedly do more to reassure the country than a hundred Presidential proclamations. It would vastly facilitate the work of collecting the proper information and the publication of it. As the matter stands, the Federal Government seems to have had a broad hint from the country as to Federal investigations which, for the benefit of Government and people alike, ought to be heeded.

IS THE COUNTRY'S INTEGRITY PARALYZED?

The *Springfield Republican*, which is generally one of the sanest papers of the country when discussing public questions, in referring to the Rockefeller Foundation, says:

But not only must one note the monopolizing tendency. There is also discernible a natural tendency of the managers of private foundations "for the advancement of mankind" to attempt the control of the causes and the institutions which they aid. Those who have studied the work of the Southern Educational Board and the Carnegie Foundation for the pensioning of teachers may

appreciate the truth of this assertion. It is almost startling to observe the progress already made by the Carnegie Foundation, which is nothing but a private pension agency, in dictating the educational policy of the colleges and universities of the country. The coercive power lurking in the simple menace of being dropped from the Carnegie list of "accepted" institutions is seen to be tremendous in its possibilities. The groveling spectacle of our American State universities rushing to share the income of the Steel bonds which Mr. Carnegie graciously diverted to the support of the superannuated professors emphasizes the moral of the situation. Thus State institutions, supported by State taxes, are coming to listen meekly, while Dr. Pritchett suggests this, that and the other modification in their educational policy.

Imagine the proposed Rockefeller Foundation, solidly buttressed by \$300,000,000, only the income of which could be used, dominating in this style the numerous beneficiaries of its benevolence during the next 500 years. Can we doubt that such a domination would be exercised? If we do, then we are child-like, indeed. The power of the purse—let us not underestimate it. Just as the enormous influence of the monasteries in the Middle Ages was based largely upon inalienable property and its usufruct, so these private incorporated foundations, living forever, would attain an influence anti-social and anti-democratic to an extraordinary degree. With financial power would go the determination to shape and divert, and thus the benevolence and the charity of society whose future needs and aspirations we cannot forecast would be controlled by the sinister influence of the dead hand.

The MANUFACTURERS' RECORD has fought this scheme for "the advancement of mankind" from the moment in 1901 when it sought to surprise the country under the cover of the adopted Conference for Education in the South, the Southern Education Board and the General Education Board. The thing was not as masked as it attempted to be. We pointed to its inherent dangers, and warned the country of the inevitable results now so clearly stated by the *Springfield Republican*. We have noted from time to time its utterly demoralizing effects. We wonder whether the mind of the country has been so debauched by its influences that the country will permit its Rockefeller Foundation to be given the even greater power for evil that will come through the incorporation asked of Congress.

AMERICA'S LACK OF OCEAN SHIPPING.

Among Southern men who have worked vigorously in behalf of a merchant marine through National aid, Mr. D. A. Tompkins of Charlotte has been a leader. As the chairman of the Merchant Marine Committee of the National Association of Manufacturers, Mr. Tompkins presided at a banquet given in New York on Monday last for the purpose of awakening renewed interest in this subject, and pressing its importance upon the country. Among the speakers was Congressman Wm. E. Humphrey, who made a remarkably strong presentation of the lack of a merchant marine, and what it means to the whole country. That we practically have no foreign shipping under the American flag is generally known. That a navy without a merchant marine would be almost helpless in time of war, is likewise understood by many, but probably few people know that, notwithstanding the vast progress of the United States in material development, our almost limitless wealth, our expansion in every line of human activity, we actually have less shipping by over 200,000 tons engaged in foreign trade than we had one hundred years ago. In discussing this situation, Mr. Humphrey said:

We are spending millions each year in the construction and maintenance of a navy

that, for want of an auxiliary in time of war, would be of little use. We have no transports for our army. Within the last two years the number of American ships upon the Pacific has decreased from 15 to six. Not a single American vessel today goes regularly to the Philippines. The trade of the Pacific Ocean last year was more than three billion of dollars. We had but six vessels to share in this great commerce.

If you wish to go to South America today you go in a foreign ship. You twice cross the Atlantic. The mails of this great nation today go to South American ports beyond the Caribbean Sea entirely in foreign ships. Some of this mail goes by way of Europe and the rest in slow and irregular vessels. Conditions are such that an American merchant sending his wares to South America is frequently compelled to ship them to Europe and from Europe back to South America again in a foreign ship, the ship of his rival and his competitor. Do you wonder that our trade with South America is disappearing?

Our mails, our diplomatic correspondence, our supplies, our ammunition and our guns are being sent to the Philippines in Japanese vessels. We have a naval station upon the island of Samoa. We have a garrison there. We have not been able to communicate with that station for the last three years except by the use of foreign ships. We are spending \$50,000,000 a year to improve our rivers and harbors, largely for the benefit of foreign subsidized ships. We are spending millions to build the Panama Canal, and when it is finished, if we continue our present policy, it will be almost entirely for the benefit of other nations. Our trade upon both oceans is at the mercy of foreign ship combinations that discriminate against us. We are not getting our fair share of the trade in South America and the Orient.

Both upon the Atlantic and Pacific are combinations of foreign trusts preying upon American commerce. Upon the Pacific Ocean is a trust called the Ship Owners' International Union. It represents more than 1,300,000 tons—practically all the foreign mail tonnage on the Pacific Ocean. It is composed of English, German and French ships. It makes no attempt to conceal its objects and purposes. Its rules and regulations have been printed, and some time ago I inserted a copy of this agreement in the *Congressional Record*. Its declared purpose is to raise freight rates from American ports.

Upon the Atlantic Ocean there is a combination of foreign ships preying upon our commerce between here and Europe. There is another that is preying upon our commerce between here and South America. These two combinations work together, pool issues, and divide the spoils. These combinations have raised freight rates within the last two years beyond all justification, except that they had the power to do it.

I have attempted briefly to call your attention to the commercial side, but the military side is more disgraceful and alarming still. According to a printed report of the War Department we should have for the use of the army in case of war 238 merchant ships of various kinds. If we were to face an emergency today we could not furnish 20 vessels suitable for war purposes. The department in the same report declares that in case of war 38 vessels would be needed in 15 days. If every American vessel was in her home port on the day that hostilities were declared and every one of them should be voluntarily offered to the government we could not assemble 38 vessels upon both oceans combined in double that time suitable for transports. It could not be done in 15 months, let alone 15 days. Neither could suitable vessels for this purpose be purchased in case of war. International law does not permit it.

All the events of the present indicate that our next contest will be upon the Pacific Ocean. We are as helpless today upon that ocean as was Russia when attacked by Japan. Her weakness then is our weakness now. We have no merchant vessels to support our navy and none to furnish us trained sailors for our vessels of war. Japan today has 560 vessels fit for transports. The United States has upon the Pacific six merchant vessels and four or five old, antiquated government transports. Japan has under construction upon her ways today more than 50 ocean-going vessels. In all the United States today there is not one and has not been for more than six years.

Japan can easily carry 200,000 troops at one time; on the Pacific we could not carry more than 10,000. Japan could place 250,000 troops in the Philippines in 30 days and 100,000 in Hawaii in the same time. We could not get 10,000 troops ready to embark from any point upon the Pacific Coast in 30

days. If we had the troops ready to embark we have no transports to carry them. If we had transports to carry them we would not dare attempt to take them to our island possessions, for we have nothing but cruisers to meet the battleships of Japan. We could not today, even in time of peace, using American ships, place 50,000 troops in the Philippines in a year. Japan has over half a million sailors, among the best trained seamen of the world, to furnish crews for her battleships. On the Pacific Ocean today there are not 1000 American sailors native born and naturalized. If we should have a contest with Japan, then all admit that we would have to depend entirely upon our navy; that our army would be utterly useless in such a contest, except possibly to prevent a landing of the Japanese upon our coast. The best we could possibly do would be to wait until the battleship fleet could come from the Atlantic to the Pacific to our assistance. But could this fleet of battleships now upon the Atlantic come to the Pacific in case of war? In time of war foreign ships could not be used to carry the coal. Sufficient American ships for this purpose do not exist.

If war was declared today upon the Pacific our mighty battleship squadron that has cost us so much could not leave the harbor in which it is anchored to come to our assistance. I present this question to you tonight as patriotic American citizens—why should we spend countless millions in time of peace for a navy that is useless in time of war? Why should we spend \$130,000,000 a year to build and maintain a navy that is worthless in time of war, and refuse to spend a few million dollars to furnish an auxiliary that would make it the second greatest navy upon all the seas?

No section of the country is more vitally concerned in the upbuilding of our shipping interests than the South. With more than one-third of the exports of the United States passing through Southern ports, with one Southern port, Galveston, ranking next to New York in the volume of its export business, and exceeding by \$25,000,000 the combined exports of all the ports on the Pacific Coast, the South has reason, from selfish motives alone, for being tremendously interested in the development of American shipping. While it is at present furnishing more than one-third of the exports of the country, the industrial development which is under way will very greatly increase its foreign trade in steel rails, in the finished products of iron and steel, as well as in many other lines of industry. The time is not far distant when the exports from Southern ports will exceed a billion dollars a year. The development of a merchant marine commensurate with the wealth and industrial activity of this country would result in the establishment of many shipyards, in the expansion of existing shipbuilding facilities, in bringing into operation direct lines of steamers between South Atlantic and Gulf ports and foreign lands. Of all sections of the country none is more vitally interested in the development of our shipbuilding, ship-owning and ship-running interests than the South.

WINSTON-SALEM TOBACCO.

As one of the results of the industrial census taken by the Board of Trade of Winston-Salem, N. C., Mr. J. S. Kuykendall, secretary of the board, presents figures relating to tobacco manufacturing in that city in 1909. They show 43 factories in active operation, 23 storage warehouses, \$18,180,000 value of products, 6280 employees, of whom 2150 were white and 4130 were negroes, who were paid \$2,140,000 salaries and wages, and 1987 horse-power, 1167 steam and 822 electric, used. The factories received during the year 5079 carloads of freight and shipped 5220 carloads of product. The dealers handled 43,207,007 pounds of tobacco, and the revenue paid to the Government amounted to \$2,592,420. Mr. Kuykendall estimates that if the tobacco factories of Winston-

Salem were arranged in one building 100x125 feet the building would rise 165 stories, and that to haul the entire freight received by the factories and their manufactured products last year would require a train of cars reaching from Philadelphia to New York.

FOR MARYLAND.

In behalf of the Just Representation League's bill for greater representation of Baltimore and other portions of the State in the Maryland Legislature, a large delegation of business men of Baltimore and some of the counties visited Annapolis this week. The fundamental argument of the League is that the material growth of the metropolis of the State is seriously hampered by its inability to obtain relief from onerous taxation. This point was elaborated by Mr. DeCourcy W. Thom, who has been a leader in the movement for reform. He said that the disproportionate contribution to the revenues of the State placed upon Baltimore has resulted in a tax rate for the city which discourages the expansion of manufacturing interests in spite of the natural advantages of the city as an industrial center. The plea for greater representation for Baltimore city, Baltimore county, Allegany county and Frederick county urged by the Just Representation League is not only eminently fair, appealing to the sense of justice, but it is also an intensely practical one. Development of the city of Baltimore to the fullness of its potentialities will directly benefit the whole State. Hampering of the city will hold back the growth of the whole State.

THE FARM AS A TEXT.

At last week's general meeting of the citizens of Arkansas at the rooms of the Board of Trade the impulse was given in the following words of President George A. Cole of the Arkansas Farmers' Union:

"If the farmer will raise one bushel of corn per acre in Arkansas it will mean \$2,000,000 per year to Arkansas.

"Ninety per cent. of each dollar the farmers of Arkansas receive for their cotton is sent out of the State for supplies that should be raised on the farm.

"Only 20 acres out of each 100 acres of farm land in Arkansas are cultivated, and much of those 20 acres very poorly.

"The farmer should be five-eighths business man and three-eighths farmer to be a success.

"The farmers of Arkansas are largely hunters, and not farmers.

"It is co-operation between the business men and the farmers that will bring success and prosperity to all of us and make Arkansas a really great State."

OIL FOR RAILROAD FUEL.

The Gulf, Colorado & Santa Fe Railroad has contracted with the Gulf Pipe Line Co. for 3,900,000 barrels of oil for fuel purposes to be delivered during the two years beginning July 1 next, according to the *Galveston News*. The deliveries, at the rate of 5342 barrels a day, are to be made at Saratoga, in Hardin county, and at Houston, where are the headquarters of the Gulf Pipe Line Co., and its subsidiary, the Gulf Refining Co. This great contract is an indication of the increasing use of oil for fuel purposes in locomotives, and directs attention to the widespread interest in the subject of the use of oil for fuel in war vessels of the several navies of the world and the strength of this country's position as the possessor of oil resources.

According to Charles D. Babbitt of Gueydan, La., negotiations are under way with Belgian capitalists for the acquisition and reclamation of 50,000 acres of wet lands south of Gueydan to be colonized by growers of truck, oranges and figs.

Plain Talk to Business Men on Good Roads*

By GOVERNOR JARED Y. SANDERS of Louisiana.

I have been asked to talk to you business men of New Orleans on the business question of good roads. I have spoken all over the State on this question during the last year, and I have told the country people something about the subject. I have presented the question as it appeared to me from their standpoint, and I have told them that they can have just the kind of roads that they want. But I have told them, too, that no matter what kind of roads they have, they are going to pay for them. I have told them that whether they have good roads or whether they have bad ones they must pay for them in one way or another. And I have told them that whether they paid a big price for bad roads or a small price for good ones made little difference; they would pay in the end for whatever kind they had.

There is no question that the poorer the road is in the country the more it costs the people who use it. The greatest road tax is not the tax that the people of New Jersey pay for their fine highways, but the indirect tax that we in Louisiana pay for our old mud holes. The difference is that in Jersey the citizen pays his dollar to the tax collector for his road tax, and in Louisiana we pay our dollar to the wagon manufacturer, the blacksmith, the mule trader and the repair man. There they pay a direct tax for good roads, and here we pay an indirect tax for bad ones.

Whether we are to have good or bad roads in Louisiana, we are going to pay in one way for the bad ones and in another way for the good ones. There is nothing worth having that we don't have to pay for. If we want roads we have got to pay for them, and if we use them, no matter what kind of roads they are, we've got to pay for them. We've got to pay for everything. It took us 25 years to learn that a public school system in Louisiana was worth having and worth paying for. We thought about this for a long time, and then we determined that the only way to get public education was for us to go down in our pockets and pay for it. And we did. I am proud to say to you that in the last 18 months the men and women of Louisiana have voted more money to public schools than has ever been voted by any other people in the same length of time.

We have learned that the public schools are worth having, and that they are worth paying for. Now we've got to learn the other lesson. We can't have public roads without paying for them. And if we have any roads we have got to pay for them. Whether you tax yourself directly and pay a road tax to your tax collector or whether you let your roads remain as they are at present, you've got to pay for them. There isn't any option. You pay directly or indirectly, but you pay in the end.

When we discuss these things it is always well to go back home for examples. Take the parish of St. Mary, where I live, for instance. A two-mill tax in St. Mary parish would yield \$14,000 per year, and \$14,000 would be enough to macadam every road in the parish. The Government Bureau of Statistics has shown us that the life of a team on good roads is three times as long as on bad ones. In St. Mary parish last year the planters and farmers there paid the stock traders on an average of \$200 per mule for 700 mules. They have given over to the stock trader, therefore, in one year an indirect tax of \$14,000, enough money to macadam every road in the parish. That is one way in which our planters and farmers have paid for their

roads in St. Mary parish. What is true of that parish is true of many others.

Don't you business men of New Orleans feel that you have no direct interest in good roads; that the question of good roads is one in which only the farmer is interested. Good roads mean to you just what they mean to him, and sometimes more. They mean an additional method of transportation into your city, an added avenue whereby the product of the country can seek a market in your great port. But your interest lies even deeper than that.

You tell us that you are the winter capital of America. What have you to offer the rich man of the North and East to come to New Orleans and spend his winter? You may talk about your attractions and you may brag of your wonderful resources, but the majority of the rich men are from Missouri. What can you offer the recreation seeker who comes to New Orleans and brings his car with him? Yes, you've got good hotels, and he can run up St. Charles avenue in his car and come down the same side—at this point Governor Sanders was interrupted by tumultuous outburst—but if the visitor wanted to take a 50-mile spin out into the country to look at some of your wonderful natural resources, I'm afraid that Paulhan is the only visitor who could ever do it here.

Your interest in public highways and good roads, gentlemen, is a cold matter of business. It would pay New Orleans, and pay her well, to alone build 1000 miles of good roads running out of your city. But you wouldn't have to do it alone. The rest of the State is ready to help you, and together you can do the work. If the coming session of the Legislature has the cordial co-operation of the business men in good-roads matter then we are ready to put on the statute-books laws that will place Louisiana in the front rank in the matter of good roads. The bills have been prepared, and represent the work of months and months. They are ready now, and are going before the Legislature.

Back of these bills there ought to be the demand of you business men that your city legislators vote for them, and if constitutional amendments are necessary to carry their provisions into execution, then you must declare yourselves ready to vote for the amendments in the elections next November.

Did you men of New Orleans catch the significance of Mr. Yoakum's statement that within a radius of 50 miles of Royal and Canal streets there are 1,000,000 acres of swamp land that could be bought, reclaimed and put into cultivation for \$15 an acre? Do you know what that means? It means that an investment of \$15,000,000 would make these waste lands worth \$100,000,000, and that reclamation and drainage is all that is necessary to do the work. You have heard that these are waste lands, gentlemen, but they're waste lands just as the pine hills of North Louisiana were waste lands 20 or 25 years ago. Then our brother from the North came here and bought them from us at \$1 and \$2 per acre, and now they are worth \$100 per acre. Waste lands! Yes! But they won't be waste lands long.

The great march of the white race has always been westward. Between two parallels, the frost line of the North and the fever line of the South, it has ever continued its march toward the west. But in that westward march it has met the Pacific Ocean, and it can go no further. In the meantime modern scientific methods have swept away the fever line of the

*From an address before the Board of Trade of New Orleans.

South, and there is nothing to keep that great tide from sweeping southward toward the Mexican border. Oh, if we could have had those 60,000 farmers who left the United States and went into Canada! If we could have had them with their \$60,000,000!

If we could have had them, we could have kept them here and we could have put them on farm lands where they could harvest a crop in January as well as in June. Would we have given them lands and a climate where they must provide in six months the sustenance for twelve? No! We could have shared our natural resources with them and given them lands on which to grow almost anything on earth.

While we're all here together I guess we can talk a little among ourselves, gentlemen, and I think I will. It's about our brag about our natural resources. God knows we don't deserve any credit for them. We tell the man who is fond of hunting that we of Louisiana have a hunter's paradise down here. But the only credit we deserve is for our efforts to conserve and preserve the game. It is almost time we stopped our brag about our natural resources and began to do something for which we can claim credit. We've got the climate and the game here, but they were here before we came, and we can't claim any credit for them. Let us at least give the hunter roads that will put him within striking distance of the game.

Thirty-one hundred miles of State highway will connect every county-seat in Louisiana with every other one. Picture Louisiana, if you can, with every county-seat connected by a system of public highways. Think what that means. It would put every piece of farm land in Louisiana up against a railroad and it would put every farmer where he could help reverse the procession of our dollars that has been moving northward and eastward since time immemorial. Take the parish of the Tangipahoa, for instance; that long, narrow parish that lies near your door. It is bisected by the Illinois Central Railroad. The farmer near the railroad raises his crop and he puts it into the markets that are crying for it, and he realizes substantially. But the man who is back from the railroad 15 miles or so. He raises the same fine products on the same fertile lands, and he gets it to the market, too, sometimes, if God is good and the weather doesn't ruin his mud-hole road. Think of what it would mean to that farmer to link the State up with the railroads by a system of State highways.

For years we have been drained of our dollars by the North and East because we had to buy of them. Let us get together and reverse that procession. Let us develop and drain our lands, raise what we need for our own sustenance and then ship our surplus and start that procession of dollars back this way. Let us at least take advantage of our natural resources, or for heaven's sake let's stop bragging about them. Let us stand together for New Orleans and Louisiana first, and then if we have any energy left after fighting for them let us expend it fighting out our own little differences.

Louisiana needs the best thought and purpose of all her sons and daughters. Mr. Yoakum has told you of the necessity of drainage for the Mississippi Valley. He has told you that we have the right to ask for it, and he is right. The precedent has been established, and we can tell them that if they use the nation's money to put water on unfertile lands in the West, then they can use it to take water off of fertile lands in the South. But we must go after it. We must go after them and we must tell them that they must help us keep their water off our land. Because it is their

water, just as much as it is ours. It was never intended that we, alone and unaided, should take care of all that water, and we have the right to demand that they help us in keeping it off of our lands. But we won't get anything unless we go after it, and we must go after it hard.

Before I conclude I want you business men of New Orleans to know that I am not a knocker. I hate a kicker. Why the oneriest mule in Louisiana can kick a five-hundred-dollar piano to pieces in five minutes, and he couldn't build one in 10 years. I could blow this building to atoms in a few seconds with a stick of dynamite, and I couldn't build it in a lifetime. I am not a kicker, but I know, as you do, that we must have a little plain talk occasionally, and I have endeavored to tell you tonight just how I felt on some things. Gentlemen, I thank you.

LITTLE ROCK'S GROWTH.

The Past Year's Improvements in the Capital City of Arkansas.

[Special Cor. Manufacturers' Record.]
Little Rock, Ark., March 11.

The annual report of Superintendent of Public Works E. A. Kingsley, covering the operations in 1909, indicates that probably in no year in the history of this city has there been greater improvement in the character of buildings. Among the most prominent building permits issued during the year were the State National Bank building, \$273,000, the largest permit ever issued in Little Rock; Marion Hotel annex, \$100,000; Board of Trade building, \$20,000; T. D. Crawford building, \$15,000; power-house for union station, \$14,000; Joppa mattress factory, \$13,000; Heinz's confectionery, \$6000. These are inside the fire limits. Permits for buildings outside the fire limits included the Florence Crittenden Home, \$30,000; Methodist Orphanage, \$20,000; Ada Thompson Memorial Home, \$20,000; one flat building, \$20,000; one flat building, \$18,000; one store building, \$18,000; addition to Parham school, \$12,000; Whitecomb-Robinson Co.'s planer, \$10,000, and seven residences, ranging in value from \$12,000 to \$7000 each.

Quite a number of sewers have been built during the year, and conditions in the south and west residence section have been very greatly improved. Districts have been added to the south city limits and the first districts in the Eighth ward have been built, adding about eight miles to the sanitary sewer system. There are now 64 miles in all of sanitary sewer. A great improvement has been made in the down-town district.

Several small street improvement districts and one or two large ones were completed, adding considerably to the paved street mileage. West 10th street was paved from High to Shiller avenue, South Main was paved from 8th to 24th, and the West Third Street district, including the streets around the depot, were paved—all with vitrified brick. Louisiana street from 2d to 9th streets and the cross streets between Louisiana and Center streets were paved with asphalt. Within the city are 31.52 miles of paved streets and 193.52 miles of graded streets.

North Carolina Interests.

[Special Cor. Manufacturers' Record.]
Raleigh, N. C., March 14.

A committee headed by Lieutenant-Governor Newland is now in the coast and sound country of North Carolina investigating the fisheries. Its report will be a bill covering the very best legislation to protect and perpetuate the fish and oyster industry. The oyster business has been but small during the past season, and but three canneries have been in operation. The North Carolina oysters are of a very fine

type, and at last they are to be conserved. The official in charge says that the planted areas have done well, and that the result is very encouraging. So far the catch of shad has not been large, but the catch of other fish has been important. The winter was the most severe in several years, and this reduced the amount of fish taken.

State Geologist Pratt, the secretary of the Good Roads Association, has expressed to the MANUFACTURERS' RECORD high appreciation of the work being done in the mountain region in the interest of the three great mountain highways, namely, the roads between Charlotte and Knoxville, Asheville and Greenville, and Spartanburg and Asheville, the total length of which will be about 330 miles. He says that 88 miles are done and arrangements made for the construction of 115 miles, and that at the Hendersonville meeting, which is to be held March 30, it is expected to arrange positively for the remaining 127 miles. He says that the townships and counties are taking up the matter with spirit, and he is very sure the roads will be built. He will see that the surveys are made, and that they are of the highest class. The Charlotte-Knoxville highway is of great importance. Of it there will be about 10 miles in Mecklenburg, 20 in Gaston, 222 in Cleveland, 30 in Rutherford, 6 in Henderson, 16 in Buncomb and about 24 in Madison. Tennessee is making provisions for its portion of this line. It is the purpose to develop the North Carolina mountain highways as never before. Cleveland county is very enthusiastic, and one town has just issued \$100,000 of good-roads bonds.

FRED A. OLDS.

FOR A COTTON-OIL MILL.

Plan of Railroad Demonstration Work on a Georgia Farm.

W. H. Leahy, general passenger agent Atlanta, Birmingham & Atlantic Railroad Co., Atlanta, Ga. writes to the MANUFACTURERS' RECORD:

"I take the liberty of advising you that the Byrom Corporation, an organization of which Mr. J. S. Byrom is president, Mr. W. H. Byrom vice-president and Mr. S. B. Byrom cashier, operates one of the finest farms in Georgia, located at Byromville, Ga., 16 miles west of Cordele, on the Atlanta, Birmingham & Atlantic Railroad. We are arranging with these gentlemen to devote a certain acreage of their farm for demonstration purposes for our mutual advantage, the idea being for homeseekers and others interested to visit such a farm and see for themselves what the South Georgia soil will produce. I have advice from the Byrom people that they are desirous of locating a cottonseed-oil mill at Byromville. I quote from their letters as follows:

"'Beg to say that we will be willing to put in our gin plant and electric plant for \$20,000, on which amount this property paid 15 per cent. clear last year after allowing for depreciation. It is in better running shape, and can be operated this coming season for less expense than ever before: in fact, our superintendent has given his estimate for putting the machinery in shape to go through the coming season at \$15 to \$18. We will take all of this in stock, and if necessary put in \$5000 cash additional. This would cover sufficient grounds for locating the oil mill, the idea of eventually locating an oil mill in connection with these properties having been borne in mind when they were constructed. The town is willing to give a five-year franchise and exemption from specific license.

"In addition, we already have signed up approximately \$10,000. The fact is, from the way subscriptions are coming in

it appears that we are going to be able to get up the entire amount around which we would prefer to do, in or have the stock thoroughly distributed among the people from whom we seed; however, we would like, if possible, to get one good man with family, who is an experienced and successful oil-mill man, to come in and take charge of it, take some stock to show good faith and to manage the property. We might add that in connection with our proposal above we will obligate to turn our seed and seed business to the mill, which approximated 200 for last season.

"As we have such an attractive drawing card for cottonseed in our splendid gin plant, we are specially desirous of getting up a cottonseed-oil mill for this season, and if you can aid us along this line we would very much appreciate the help. The present investment is very attractive from a profit standpoint, and we think we should work up our seed here instead of sending them away away to be worked."

To Build New Steamships.

President Key Compton of the Chesapeake Steamship Co., which operates lines of steamers between Baltimore and Norfolk and Baltimore and Richmond, announces that arrangements have been completed for the construction of two new steamships for the service between Baltimore and Norfolk. The specifications for these boats are now being prepared under the supervision of Mr. Compton. Each of them will be about 310 feet long, and will have 150 staterooms, with a total capacity for 400 passengers, while the first-class freight capacity will be 700 tons. Their cost will be \$375,000 each. Both ships will be identical in construction, and in equipment they will contain the most modern facilities of the day. Particular attention will be given to passenger accommodations, and every facility will be incorporated that will tend to promote the comfort of the traveling public. All necessary financial operations covering the cost of constructing the ships have been made, and just as soon as the specifications are completed they will be submitted to several large shipbuilding firms for estimates on construction.

The Chesapeake Steamship Co., which is jointly owned by the Southern Railway and the Atlantic Coast Line, has been operating on the Chesapeake Bay for a number of years. Its present line of steamers, while they are not quite as large as the new ones will be, have splendid accommodations for passengers.

Salt Machinery and Sacks.

Martin Lopez & Co., P. O. Box 148, San German, Porto Rico, write the MANUFACTURERS' RECORD:

"We are interested in purchasing a complete outfit of machinery for making table salt from rock salt. I trust that you may know exactly what I want and that you will kindly put me in touch with the right parties. I would also want small one-pound sacks for packing the salt."

Crude Oil Engines.

The Italian Import & Export Co., Genoa, Italy, writes the MANUFACTURERS' RECORD:

"We shall be very glad if you would kindly let us have the address of some reliable manufacturers of crude oil engines. We do not desire manufacturers of petroleum or gasoline engines but of real crude oil or 'nafta' engines, as these fuels are the only ones usable in our markets, the cost of gasoline and petroleum here being prohibitive."

FRUIT IN PIEDMONT VIRGINIA

By SAMUEL B. WOODS of Charlottesville.

[Written for the Manufacturers' Record.]

The Piedmont section of Virginia is famous, and destined to become more famous, for the high quality of its fruits. Soil, climate and elevation combine to give the apple tree just what it wants for long life and prosperity. It is no uncommon thing among the mountains and foothills of this region to find trees a hundred or more years old still bearing apples of commercial value. Besides soil, climate and elevation, the sunshine of this section, whose skies rival those of Italy, joins to give the fruit a delicious flavor, a delicate and delightful aroma that surpasses that of the apples of any other section of the United States. Put a box of the finest Oregon apples in a corner of a dark room and a box of well-ripened Albemarle pippins in another, and turn a man loose and he will follow his nose to the Albemarles every time. Nature has put up in no other package such a delicious combination of sugar and acid as in the Albemarle pippin, which grows to perfection only in some of the soils of this favored section. Many varieties of apples are more beautiful than the Albemarle, but in fine flavor it excels them all. It takes its name from Albemarle county, Virginia, in which it originated.

At the time of Braddock's defeat his commissary officer, Dr. Walker, who was among the remnant saved by George Washington, when he returned to his home in Albemarle county brought in his saddle bags some scions of different varieties of apples and grafted them on the native trees. From one of these grafts came the Albemarle pippin. It is supposed to be of the Newtown pippin stock, though in its new environment it soon surpassed that variety in appearance and flavor. In the early years of Queen Victoria's reign Andrew Stevenson, who lived near Charlottesville, was minister to England. He presented some barrels of these apples to the Queen, who, captivated by their excellence, removed from Albemarle pippins alone a small duty then upon apples for the benefit of the crown and admitted them free. Queen Victoria's partiality for the Albemarle pippin continued all her days, and gave this variety an introduction into high life abroad. They are grown to perfection only in comparatively few localities in Piedmont, where the soil and elevation is just right. The soil adapted to it is of volcanic origin, doubtless the rotten lava of bygone ages of the same character as that which has made the hills near Pompeii famous for the fig, the grape and the olive. This same soil will put more flavor into other varieties than any other character of soil in the State. The Winesap, Spitzenberg and other red apples are of wonderful flavor, while the York Imperial loses its coarseness, its flesh becomes fine in texture, rich in flavor, and instead of the striped red and yellow color it usually exhibits, it shows a handsome dark red all over. Even the Ben Davis grown in these soils develops a sprightly sub-acid flavor which is very unlike the Western variety.

Formerly apples were grown all through Piedmont Virginia without care or attention. But the evil day came when scientists introduced with graftwood from abroad all the ill apples are heir to. Now the apple grower must spray, spray, spray. This adds to the cost somewhat, about 25 cents a season for each well-grown apple tree in good bearing. The bitter rot, which attacks the fruit for some years, promised to wipe out the apple business. It was especially destructive to Albemarle pippins. The United States Department of Agriculture began experi-

ments to combat the disease. The writer went to see the results of its labors in a bearing orchard in an adjoining county. He was satisfied that the victory was won and that intelligent spraying was all that was needed, and went home and bought a pippin orchard that had not matured a crop in five years. He pruned, sprayed, fertilized and cultivated, and after the first year for three successive years has gotten fine crops of apples, which have brought him \$6 per barrel in October to \$8 later on, and as much as \$4 and \$5 a box wrapped and packed like the Oregon apples. The apples from this orchard took a gold medal at Jamestown, and first prize at the Virginia State Horticultural Society, the Virginia State Fair and wherever exhibited. This year I have sold from Connecticut to Texas, and from Wisconsin to Florida, and from all sections I hear the glad tidings: "We have never known apples of such fine flavor." Some of my trees about 25 years old, not fully grown, bore 16 barrels and over to the tree, and I could have cut out an acre that paid me over \$1000 in this year's crop. A neighbor, Mr. Wayland, had one tree with 22 barrels of Albemarles, of which 21 were No. 1 apples. At \$6 per barrel, this tree yielded this year \$126 worth of apples. An acre of 40 trees at this rate would yield how much? Within a mile or so of these orchards is a tree over 100 years of age which a few years ago bore 27 barrels of Albemarles.

On a farm adjoining the orchard I bought is an old orchard of less than 600 trees on less than 20 acres of land, planted by Dr. Boaz, who was the first man to plant a commercial orchard in this section. He was laughed at and told that he was spoiling fine tobacco land, and in a few years would grub up his trees and plant tobacco again. For a single crop from this orchard \$15,000 has been refused. This old orchard, with younger trees planted by Dr. Boaz's children and successfully attended to by one of his sons, this year yielded over \$18,000. There are other orchards in Albemarle and Piedmont Virginia doing just as well, and it is safe to say that, considering the moderate cost of the land and expenses, there are no agricultural lands in the United States making returns that will equal the orchards of Piedmont.

The important fact ought not to be overlooked that Piedmont is not competing with the rest of the world. The fine commercial orchards of the great Valley of Virginia must always compete with Pennsylvania and New York and the great Mississippi basin. Piedmont is in a class in which Oregon and the Pacific slope alone can compete, and they only because of their handsome fruit and their splendid methods of packing and enterprising advertising. When it comes to the flavor of the fruit, the man with a palate will say that Piedmont is far in the lead. This is the decision of experts. All the gold medals—and there was quite a shower of them—won by Virginia in the great expositions, such as Paris, Buffalo, St. Louis, were won by Piedmont Virginia, and of the 17 gold medals at Jamestown, all were won by Piedmont except three.

In addition to its natural advantages, the Piedmont section of Virginia has fine transportation facilities. The Southern Railway, the Chesapeake & Ohio and the Norfolk & Western all pass through Piedmont, and furnish fast freight and express to the North and South and also West.

In a recent conversation with a high official of the United States Department of

Agriculture, who knows the apple industry of this country "like a book," he told me that in Piedmont Virginia we could grow a finer-flavored apple than could be grown on the Pacific slope, and at half the cost.

THE IRON BUSINESS.

Some Improvement Noted in the Birmingham District.

[Special Cor. Manufacturers' Record.]

Birmingham, Ala., March 14.

The writer made a thorough canvass to sound the different interests as to business done the past week, the feeling as to general conditions and future outlook. While the volume of business was comparatively small, still there was a certain air of restored confidence, and one felt it keenly in the presence of those who are directly responsible for the placing of tonnage. There was one sale of 5000 tons of Southern iron made to a middle Western concern, the price being on basis of \$14 per ton at the furnace. Another sale of 500 tons is recorded at \$13.50 per ton, and still other odd lots of 75 to 100 tons, ranging in price from \$13.50 to \$14 at the furnace. As yet there has been no established firm base price, it being generally understood that the Southern iron market today is \$13.50 to \$14, No. 2 foundry basis. A few carlot orders were booked of resale iron as low as \$13 at the furnace. There was a perceptible absence of trading in warrant iron the past week, showing that the offering of same is narrowing down considerably. Then, again, certain bookings under \$13.50 per ton are traceable to low-phosphorus iron. It is understood that a large pipe concern has been sounding the Southern market pretty thoroughly, but so far no sale has been recorded. This in itself has had a tendency to add strength to the situation.

The city of Atlanta, Ga., has just placed an order for a round lot of water pipe, and other large Southern cities are manifesting an interest in this direction, now that open weather can be reasonably looked for in the near future. There has been no cessation of work at the local shops here, and stocks on the yards are comparatively small. Inquiries are reported some better the past week than for several weeks previous. Buyers, at least, seem to be willing to figure on their requirements. Following prices per net ton f. o. b. cars here are quoted: Four-inch, \$24; 6, 8 and 10-inch, \$22; 12-inch and over, average of \$21, with \$1 a ton extra for gaspipe; fittings, \$60 per net ton f. o. b. cars Birmingham.

Scrap-iron conditions appear to be in keeping with the pig-iron market. There has been some better feeling; in fact, as one of our largest dealers expressed himself, more so than at any time the past three months. Dealers are less inclined to accept "a price" for their scrap. On the other hand, it is being piled on the yard, and will be held for an advance, which is looked for. There seems to be no particular demand for any class of old material. Some of the local consumers, as well as Eastern and Western, have solicited quotations. Following are quotations per gross ton f. o. b. cars here:

Old iron axles, \$20 to \$20.50.
Old iron rails, \$15.75 to \$16.25.
Old steel axles, \$17.75 to \$18.25.
No. 1 railroad wrought, \$14 to \$14.50.
No. 2 railroad wrought, \$12 to \$12.50.
Dealers' wrought, \$12 to \$12.50.
Old steel rails, \$12.50 to \$13.
No. 1 machinery, \$12.50 to \$13.
No. 1 steel, \$13 to \$13.50.
Old standard car wheels, \$13.75 to \$14.25.
Light castings, stove plate, \$9.75 to \$10.25.
Cast borings, \$6 to \$6.25.

The Tennessee Coal, Iron & Railroad Co., through the efforts of local officials,

were awarded contract for a good percentage of the last order placed by the Southern Railway Co. for rails. This is another "boost" for Ensley rail, and "repeating" orders are the ones that express merit of a product and proclaim its stability.

Last week's bank clearings for Birmingham show an increase of \$640,967.00, as compared with clearings for same week the year previous.

The different railroad lines entering Birmingham express, through their representatives, a better general feeling the past week than has existed with them for some time past, and the men who solicit tonnage say the improvement in their line is marked. Recent troubles as to car supply have been practically eliminated, and additional motive power has been placed in the district.

On March 28 the plant of the Woodstock Iron Co., Anniston, Ala., will be offered for sale. Mr. W. E. Leake, a prominent coal expert, has been appointed a trustee, and has been in Birmingham the past week conferring with certain parties in regard to plans for reorganization.

FROM MINE TO GULF.

West Virginia Bunker Coal for Vessels at Texas City.

It was recently announced by the Davis Coal & Coke Co., with main offices in Baltimore, that arrangements had been made for establishing a distributing plant at Texas City, Tex. The plant will be located at the large terminals being constructed at this point by the Texas City Transportation Co. A section 350 feet wide by 800 feet long has been constructed on one of the big piers now being erected, and the equipment will be installed for handling daily between 600 and 700 tons of coal, while the total storage capacity will be about 20,000 tons of coal. The principal business will be the selling of bunker coal to steamships.

It has always been customary for steamships on their way from ports on the Gulf of Mexico to Europe to stop at Norfolk or Newport News for bunker coal before crossing the ocean, and it has been felt by establishing a plant capable of supplying a large quantity of high-grade bunker coal daily at a convenient point on the Gulf of Mexico that much of this business could be secured.

In addition, however, to selling bunker coal, it is the intention of the Davis Coal & Coke Co. to develop a market throughout Texas for its smithing coal.

The Davis Coal & Coke Co. has extensive mining operations in Maryland and West Virginia, the output of the mines being about 12,000 tons daily. These mines are located on the Western Maryland Railroad, which brings the coal direct to tidewater at Baltimore.

For the Texas City plant the coal will be shipped by steamships and sailing vessels direct from Baltimore. Having the advantage of a short rail haul and a long water haul, the company will be enabled to place its coal at Texas City at a comparatively small cost. The plant will be completed and in full operation by July. A branch office will be located at Galveston, Tex., and all sales in the Southwest will be made through this office.

All negotiations connected with the establishment of this new plant were conducted by Vice-President and General Manager E. Kelley Rothstein.

The Wyckoff Plant in Louisiana.

The A. Wyckoff & Son Company of Louisiana, C. C. Crew, manager, Alexander, La., has ordered machinery to double the capacity of its plant for manufacturing steel-banded wood water pipe and wood steam pipe casing. This plant was completed about a month ago, and

comprises a main building 72x112 feet, with a brick boiler-room 36x32 feet, costing about \$6000. Its daily capacity is 1200 feet of pipe, and it is at present operating both day and night, so that the output is 2400 feet of pipe, which will be doubled by the new machinery mentioned. This is a branch of the A. Wyckoff & Son Company of Elmira, N. Y.

Giving Facts.

The Northwest Texas and Southwest Oklahoma Association of Commercial Clubs is circulating an attractively illustrated pamphlet telling of the rapid development of its section of the country by means of succinct statements from the secretaries of its constituent bodies: E. P. Reynolds, Commercial Club, Burkburnett, Tex.; H. S. Crawford, Board of Trade, Childress, Tex.; E. S. Hendrick, Commercial Club, Chillicothe, Tex.; W. W. Housewright, Commercial Club, DeVol, Okla.; C. A. Jones, Commercial Club, Electra, Tex.; J. T. Denton, Board of Trade, Henrietta, Tex.; C. H. Clark, Commercial Club, Iowa Park, Tex.; W. J. Hoetzel, Commercial Club, Lazare, Tex.; Z. T. Pryse, Chamber of Commerce, Mangum, Okla.; J. F. Croft, Commercial Club, Matador, Tex.; T. R. Coffield, Commercial Club, Newcastle, Tex.; W. E. Prescott, Commercial Club, Paducah, Tex.; George Fleming, Commercial Club, Petrolia, Tex.; P. A. Whaley, Chamber of Commerce, Quanah, Tex.; J. Ray, Board of Trade, Vernon, Tex., and W. C. Barrickman, Chamber of Commerce, Wichita Falls, Tex. The officers of the association are Messrs. M. E. Kerrigan, Quanah, Tex., president; W. A. Stinson, Frederick, Okla., and R. H. Norris of Childress, Tex., vice-presidents; Lee Hawkins, Mangum, Okla., treasurer, and W. C. Barrickman, Wichita Falls, Tex., secretary.

Two Fine Steamers to Be Built.

The Chesapeake Steamship Co. of Baltimore announces that arrangements have been completed to add two fine new vessels to its fleet. They will cost \$375,000 each, and will be from 310 to 320 feet long. Each will have a capacity of 700 tons of high-class freight. There will be 150 state-rooms on each vessel, with a capacity of 400 passengers. Specifications for their construction are being prepared under the supervision of President Key Compton, who arranged the financing, and who is now engaged on the plans. Mr. Compton has been at the head of the Chesapeake Steamship Co. only since last July, when he succeeded Mr. Reuben Foster, who is still a member of the board of directors, but in point of service Mr. Compton is an experienced and practical steamboat man, having been more than 20 years in this line of the transportation business. His policy is progressive, and works toward obtaining the best equipment with the highest standards in its operation. The new vessels will be alike, and passengers using either will have the same service and the same accommodations. The Chesapeake Steamship Co. is owned by the Southern Railway and the Atlantic Coast Line Railroad, the first owning two-thirds of the stock and the latter one-third.

It is reported that Mr. W. S. Delery of Houston has been given the contract for more than 27 miles of grading in connection with a townsite to be known as Shu City, on the Santa Fe Railroad, midway between Pearland and Alvin, in the heart of the citrus belt of Texas. It is proposed to erect there a factory to make men's shoes. A block of ground has been given for a church, one will be given for a school, and arrangements have been made for the location there of a small canning factory by W. T. Walker of Des Moines, Iowa.

SOUTHERN COMMERCIAL BODIES WANT INDUSTRIES

WHAT IS YOUR TOWN DOING?

The MANUFACTURERS' RECORD will be glad to receive from responsible correspondents in every town in the South brief items of news about business conditions and the opportunities for industrial enterprises. This information is desired for publication without cost of any kind to the sender, and regardless of whether the writer of the letter is a subscriber or not. The MANUFACTURERS' RECORD accepts no paid town write-ups. It seeks information of this kind from commercial and industrial organizations and from municipal authorities in every town and city of the South.

FOR WOODWORKING PLANTS.

Development Company of the Decaturs,
New Decatur, Ala., March 10.

Editor Manufacturers' Record:

There has been recently installed here a cedar pencil slab factory having a large capacity. The Decaturs are fast becoming a great manufacturing center on account of exceedingly advantageous shipping facilities.

There is ample room here for any number of woodworking manufacturing plants, preferably furniture, mantels, caskets, coffins, etc., on account of the availability of raw material and shipping facilities in all directions. A good practical mechanic with a small capital will find here proper encouragement from our progressive citizens in any line above cited. New Decatur is now engaged in a great system of public improvements in extending the public sewer system, paved streets, concrete walks, etc.

The Decaturs enjoy all the public utilities found in the most advanced cities in the South. Well provided with schools and churches, all of a high order in their severalities. The country leading into the Decaturs is well provided with a fine system of pike roads, thus stimulating a more perfect system of cultivating the lands contiguous to the Decaturs.

CHAS. BASSETT,
Secretary.

BUILDING AT HOUSTON.

Business League,
Houston, Tex., March 11.

Editor Manufacturers' Record:

Nothing is more convincing of the rapid development of Houston than its building record for the past 12 months, in which building permits of the estimated value of \$3,500,000 were issued, covering business structures and dwelling-houses. The increase over the preceding 12 months was \$2,250,000.

The activity has not been confined to any one character of buildings, but it applied to every class. To the 16-story modern fireproof office structure to the most modern dwelling. Neither was the activity confined to any particular section of the city. The outlook is very flattering for a continuation of building operations. Many buildings of costly construction are at present being erected, while others contemplated will bring about a period of activity which will probably exceed that of the year just closed. A million-dollar modern hotel, half-million-dollar apartment-house and the new City Auditorium (the latter two in course of construction and the former assured) are probably most worthy of mention. Both the new county courthouse and the Federal building are nearing completion, and will shortly be turned over by the contractors. The character of the structure being erected is specially worthy of mention, and where devoted to public utility purposes are of fireproof construction and thoroughly modern, yet presenting architectural designs specially pleasing to the eye. The new banking structure, the home of the South Texas National Bank, has a marble front and is of colonial design.

South of the ship channel, and especially in the southern portion of the city, home building is prolific. Realty compa-

nies and concerns making a specialty of homebuilding are playing an important part in the development of the suburbs.

ADOLPH BOLDT,
Secretary.

DOING THINGS.

Commercial Club,
Stamford, Tex., March 10.

Editor Manufacturers' Record:

The Stamford Commercial Club has started its work with the following things in view: The securing of more wholesale and jobbing houses, a creamery, a peanut mill, one or more railroads, small enterprises of all kinds. Up to date it has secured one large wholesale produce house, branch house of the Armour Packing Co., branch house of the Texas Company and a \$10,000 creamery. It has practically consummated a deal for a cigar factory, and is under negotiations for a peanut mill. In addition to this, the club is under negotiations for two railroads, one or both of which will be consummated within the next 30 or 60 days, and it is giving every possible assistance to the farmers in aiding in the securing of good seed and otherwise helping them. The organization will secure the services of H. W. Campbell, the well-known dry farming expert, for lectures, and is giving substantial encouragement to the growth of broom corn, with the expectation of securing a broom factory before the year is past. It is giving every possible assistance to new business buildings in the city, and it has some very bright prospects in securing a large number of new business buildings for the city. Having succeeded so well in the program so far, the club is going to add a number of new things to the program for the year. Among other things it will have to do in the way of entertaining will be the Texas State Press Association, which will meet here in June, and a number of smaller conventions. The club is also doing a vast amount of advertising, and its campaign along this line is always on the program.

HOMER D. WADE,
Secretary.

PROGRESSIVE AUSTIN.

Business League,
Austin, Tex., March 10.

Editor Manufacturers' Record:

It cannot be said that Austin is less progressive than other towns, for we have the evidence to prove we are fully abreast of the times. Today work is progressing on two eight-story bank and office buildings, one to cost \$700,000, the other \$400,000. When completed next month the new concrete bridge across the Colorado will be turned over to the proper authorities and Austin will then have one of the finest bridges of the kind in the South. The public-spirited people voted \$200,000 for this purpose, and everyone is glad that he did it. The University of Texas will begin the erection of a library building to cost \$250,000 next month. The \$150,000 heating plant for the University is nearing completion.

The League has been the means of securing for Austin the Swedish College, and in a short time this institution will be started.

Our people will on the 18th vote on the proposition to issue bonds for the purpose

of building more schools in the amount of \$75,000. They will also vote on the issuance of \$100,000 for street bonds and \$150,000 for sewerage for East Austin. From the interest shown and the desire on the part of our citizens to keep abreast of the times, it is quite evident that these issues will carry and Austin be the equal of any city in progress and improvement.

Every bank building in the city has felt the pulse of the growth of business, and all have met the demand by making extensive improvements indeed. Clearances for the year of 1908 were \$27,413,262; for 1909, \$38,894,122.

Austin's taxable values increased from \$13,690,326 in 1908 to \$17,590,000 in 1909.

Efforts are now under way to replace the great dam in Austin. This, when completed, will give us a lake of 27 miles, the equal of any artificial lake in the country, and will supply from 1000 to 3000 horsepower, which can be sold so cheap it is bound to attract the manufacturer.

Austin wants factories. She wants a good up-to-date European hotel. She wants modern department stores. She wants good people to come here to live. Her people are kind and hospitable, and the hand of welcome is always extended to the man of brain or brawn, and one can feel assured that here he will find that place that he has long looked for.

WILL L. VINING,
Secretary.

FOR IMPROVEMENTS.

Clarksville, Ga., March 8.

Editor Manufacturers' Record:

The City Council of Clarksville passed a resolution at its regular meeting on the 4th of March to macadamize Washington street, as well as to build brick or concrete sidewalks on each side of the street. The bonds have already been passed on, and work will begin as soon as the Council can secure the services of a competent engineer to make the surveys and plans for the work. The Mayor can be addressed.

A company will be organized during this month to build a steam railroad from Toccoa to Carnesville, Ga., a distance of 20 miles. The required amount of money has been subscribed, the survey made and the contract will be let in the next few days.

J. H. HICKS,
Mayor.

BROWNWOOD EXPANDING.

Commercial Club,
Brownwood, Tex., March 11.

Editor Manufacturers' Record:

Contract for grade work of the Brownwood North & South Railway for the first 20 miles, from Brownwood to May, was awarded to the Texas Building Co. of Fort Worth on the 10th.

Col. R. A. Love has been elected president; Brooks Smith, vice-president and treasurer of the Brownwood Southwestern, and T. A. Love, vice-president and general superintendent. A. B. Carson, chief engineer, with a party has started the survey from Brownwood to Rockwood, a distance of 30 miles, and Colonel Love announced that contract will be let inside of 30 days for the completion of the road.

Brooke Smith has let the contract to Al Morton for his 10-room business house.

Daniel Baker (Presbyterian) College has plans for a large girls' dormitory and Y. M. C. A. building, to cost in the neighborhood of \$100,000, and expects to be in position to let the contract about the first of May. T. P. Junkin is president.

The Methodists will build a new \$5000 parsonage and a new \$40,000 to \$50,000

church. Contract will be let about the first of May.

Hoof & Staags, a local firm, have been awarded the contract for the new Southern Hotel; announced cost of \$85,000.

The new Santa Fe passenger station will be ready for occupancy about April 1.

D. F. JOHNSON,
Secretary.

GETTING PACKING-HOUSES.

Progressive Club,
Sweetwater, Tex., February 23.

Editor Manufacturers' Record:

I have been so busy locating packing-houses and other enterprises that it seemed that I would never have the time to do anything else. We have just had a fine banquet at which we raised \$5000 with which to boost this country. We have closed a contract with the McSweeney packing-house people of New Jersey, in which they agree to put in a \$200,000 plant at this place, and we are now about to close with two other packers to locate with us. If you can say anything for us in regard to this packery we will appreciate it.

R. A. MUSGROVE,
Secretary.

Detailed information about towns seeking manufacturing enterprises and offering specific advantages for development and business opportunities can be found under the head of "Classified Opportunities" on pages 78, 79, 80, and under "Cities, Towns and Railroads Inviting Factories" on pages 119, 120, 121 and 122.

WORK AT ARANSAS PASS.

Terminal Railroad in Connection
With the Dredging of New
Channel.

E. O. Burton, one of the incorporators of the Aransas Terminal Railroad Co., Aransas Pass, Tex., writes from San Antonio, Tex., that the railroad was chartered to build a line from a connection on the San Antonio & Aransas Pass Railway about seven miles to deep water on Harbor Island, on a dump thrown up by the dredging of the channel by the Aransas Pass Channel & Dock Co. He also says that a bulkhead holds the dirt in shape thrown out by the dredge, so the dredging almost completes the railroad dump.

There will be about one mile of trestle, one 40-foot drawbridge, and the company will soon be in the market for ties, steel and bridge material.

The directors have not yet met to elect officers. The Aransas Pass Channel & Dock Co. has two dredges at work, one now in 8000 feet from the east side of Harbor Island and the other dredging from the lighthouse to the mouth of the channel along the shore about a mile. As soon as this is completed they will move around to the west end of the cut, and the two dredges will work toward each other until the channel is completed, about 12,000 feet, or more than two miles.

A number of other railroad extensions are being planned to Aransas Pass, among them being the L. E. Walker road, from Quanah; the Missouri, Kansas & Texas line, from Smithville via Gonzales and Cuero; the Edwards road, from a connection with its north and south lines at McMullen; the C. F. Simmons road, from its present terminus at Christine, and another line from Eagle Pass via Carrizo Springs to Aransas Pass.

The other gentlemen interested in the Aransas Terminal Railroad are A. L. Matlock, A. J. Bell and A. H. Danforth of San Antonio, Tex.; Fred. L. Alvord and A. R. Boyd of Fort Worth, Tex.; R. E. Clark of Galveston, Tex.; D. M. Picton of Rockport, Tex.; J. F. Green of Gregory, Tex., and J. J. Welder of Victoria, Tex.

It is not decided when bids will be received, but plans are being prepared.

RAILROADS

[A complete record of all new railroad building in the South will be found in the Construction Department.]

NEW ST. LOUIS RAILWAY.

Joseph Ramsey, Jr., or the Manufacturers' Road Will Build a Through Road.

George F. Moore, president of the Manufacturers' Railway of St. Louis, is quoted in a report from that city as making the positive announcement that the contemplated new trunk line to the Southwest, in which his company has been interested for several months, as previously reported, will be built either by Joseph Ramsey, Jr., former president of the Wabash Railway, and now vice-president of the Ann Arbor Railroad and the Detroit, Toledo & Ironton Railroad, or else by the Manufacturers' Railway. Mr. Ramsey has associated with him Malcolm Niven of New York in the enterprise, which is known as the St. Louis & Pacific Railway, and which is projected from St. Louis to Fort Smith, Ark., 310 miles. The grade is to be kept down to one-half of 1 per cent., and the curves will also be easy. It is estimated that \$70,000 a mile will cover the cost of construction, and Mr. Niven is reported as saying that more than three-quarters of the capital has been secured.

The Manufacturers' Railway, which has about 20 or 25 miles of terminal tracks at St. Louis, with more construction in progress, is to furnish entrance to the city, including terminal facilities, for the new line, which, as stated, will be built at all events, either by one side or the other who are interested in it.

President Moore is further reported as saying that an important railroad in the Southwest has expressed a readiness to make an arrangement with the Manufacturers' Railway to form a new route to the Southwest, and it is determined to establish such a line. The capital stock of his company has been increased from \$250,000 to \$5,000,000, and the directors have also authorized a bond issue of \$5,000,000. A large tract of land in the southwestern part of St. Louis county may be used for extensive yards, and the company also has land on the Illinois side of the Mississippi, opposite St. Louis, which it proposes to develop also for terminals.

A TWO-STATE ENTERPRISE.

Virginia-Carolina Railway May Be
Extended to Jefferson and
Wilkesboro.

A press dispatch from Damascus, Va., says that announcement has been made at the office of the Virginia-Carolina Railway at Abingdon, Va., that construction will begin in a few weeks upon the extension toward the North Carolina boundary on the contemplated line to Jefferson and Wilkesboro, N. C., connecting with the Southern Railway and with the Seaboard Air Line. Engineers have been surveying, and already several miles have been put under contract. The Harris Construction Co. of Damascus is one of the contractors, and has work on the road which will require a year to complete. Eastern capitalists are reported interested, and it is said a line will be surveyed in the other direction from Abingdon to the Virginia coal fields, making connection there with a line to the north. Wilton E. Mingea of Abingdon is president.

T. C. Bowie, attorney at law, Jefferson, N. C., who is reported interested in the proposed extension, writes the MANUFACTURERS' RECORD that the plans include the Virginia-Carolina Railway and the Ashe County Railroad, to be built from the Virginia boundary via Jefferson, N. C., to Wilkesboro, N. C., connecting there with

a line from Charlotte to Newton and Taylorsville, N. C. An election is to be held this month in Ashe county to vote on a subscription to the enterprise, and people in Wilkes county are quoted as saying that they will turn over to the new road a railroad subscription voted some years ago. Mr. Bowie also says that Charlotte, through its business men and the Greater Charlotte Club, will support the proposition. The proposed line will give a short route from the Southwestern Virginia coal fields through Northwestern North Carolina and into the central part of the State, with several lines from Newton and Charlotte to reach the coast. Engineers have made estimates, and it is believed that the enterprise will be successfully completed.

HOUSTON-GALVESTON LINE.

First Contract Let, and Others Soon
to Follow—May Be Complete
by End of Year.

Mark Lowd, Southwestern superintendent for the Stone & Webster Engineering Corporation of Boston, is quoted in a report from Houston, Tex., as announcing that orders have been given to begin immediately construction of the Houston-Galveston Interurban Railway. One contract has been let to the North American Dredging Co. to handle 125,000 cubic yards of material by hydraulic process. This is on the right of way from the city limits of Galveston to the beginning of the causeway, and the strip is 50 feet wide. This will raise the roadbed above high tide.

Bids are also being asked for the grading of a section of 16 miles of the roadbed from a point about two miles south of Texas City junction, and thence northward to Clear Creek. Contract is expected to be awarded March 18, and construction to begin by April 1. Soon thereafter bids will be received for a second section of 19 miles from Clear Creek to Brays Bayou, and not long after that the last section of only a few miles to the city limits of Houston will be let.

Timber will be required for about 3000 feet of trestles, which vary in length from 30 to 600 feet, and 130,000 ties will also be required. It is said that 500,000 pounds of copper wire have already been purchased from the W. A. Clark Company of New York, and that the rail contract for about 5700 tons of 80-pound rails has probably been closed with the Pennsylvania Steel Co. Most of the machinery for the main power-house at or near Texas City is also reported purchased. There will be four substations at different points on the line. The main power-house will cost about \$250,000, and it is expected the tracklaying on the line will begin about August 1.

The road is absolutely straight for 36 miles, and there is only one curve, and that is slight. If the causeway is completed by January 1 next it is stated that the line will be ready for operation at that time.

MAY BE IMPORTANT LINK.

Tellico Railway Reported Bought to
Connect Two Large Systems.

The Tellico Railway, 24 miles long from Athens, Tenn., eastward to Tellico Plains, has been purchased by the Louisville & Nashville Railroad Co., according to a report from Knoxville. Athens is on the Southern Railway, between Knoxville and Chattanooga, and the Tellico road crosses the Louisville & Nashville's Atlanta line at Englewood, eight miles east.

The road extends into a rich timber region in the mountains between Tennessee and the Carolinas. It was built in 1887. There are rumors that the Louisville & Nashville contemplates extending it possibly into South Carolina to connect with the Atlantic Coast Line, which owns the

Louisville & Nashville. To make such connections would require the building of about 125 miles of line from Tellico through the mountains into North Carolina, and thence to Greenville, S. C.

It is further stated that J. H. Ellis, secretary of the Louisville & Nashville, was in Athens last week examining the titles of the property to conclude the deal; also that the East Tennessee National Bank of Knoxville has held the stock of the Tellico road for some time, and that the transaction was arranged by representatives of that institution. C. E. Lucky of Knoxville is president of the railway.

HAWLEY GETS HOCKING.

Chesapeake & Ohio Obtains Lake
Outlet, and New York Central
Also Gains.

A press report from New York quotes Edwin Hawley as saying that a deal has been practically concluded by which the Chesapeake & Ohio Railway will take over the Hocking Valley Railroad, and the Lake Shore (New York Central system) will take the Toledo & Ohio Central, and that both systems will jointly control the Kanawha & Michigan Railway, but that the papers are not yet signed. A traffic arrangement has been made between the properties.

By this arrangement the Chesapeake & Ohio secures its own outlet to the Great Lakes and the New York Central system gets another line down into West Virginia, it being already interested in the proposed Buckhannon & Northern Railway.

MEMPHIS TO PENSACOLA.

New Company Chartered and Foreign
Capitalists Said to Be
Interested.

The application of the Memphis, Pensacola & Northwestern Railroad Co., according to a dispatch from Jackson, Miss., has been approved for charter by the Governor, and the proposed line will be about 385 miles long from Memphis Tenn., via Plum Point, Meridian and Pine Ridge, Miss., into Alabama, and thence to Pensacola, Fla.

D. S. Rice of Memphis, who is one of the incorporators, is quoted as saying that survey has been made and an engineer has been in Memphis for some time representing capitalists of London and Paris who are interested. The route, however, is not fully determined.

The incorporators are J. M. Dockery of Dockery & Donelson, Memphis, Tenn.; Will Dockery of Dockery, Miss.; George Neuhardt of the Chickasaw Bank & Trust Co., H. T. Bruce, Dr. B. G. Henning, M. J. Roach, J. H. Scaife, D. S. Rice and S. Walter Jones, all of Memphis.

New Equipment, Rails, Etc.

The Norfolk & Western Railway Co. has arranged to purchase new equipment as follows: Forty 12-wheel freight locomotives, weighing approximately 260,000 pounds in working order, to be built by the Baldwin Locomotive Works, Philadelphia; 10 Pacific type passenger locomotives, weighing approximately 247,000 pounds in working order, to be built by the American Locomotive Co., New York; 1500 all-steel hopper-bottom gondola cars of 50 tons capacity and 500 40 tons capacity steel frame stock cars, to be built by the American Car & Foundry Co., St. Louis; 500 all-steel flat drop-bottom gondola cars of 50 tons capacity, to be built by the Western Steel Car & Foundry Co., Chicago.

The Baltimore & Ohio Railroad has received two new electric locomotives for use on its belt line in Baltimore. Each has two trucks permanently coupled together with a cab on top. They weigh 90 tons

on the driving wheels, and two of them may be linked together and operated by one engineer, thus making practically one locomotive of 180 tons weight on the drivers, which could haul a train of 6000 tons on the level or 1000 tons on a grade 80 feet per mile. They were built by the General Electric Co., Schenectady, N. Y.

The Raleigh & Southport Railway Co. has given contract to R. C. Hoffman & Co., Southern sales agents of the Maryland Steel Co. at Baltimore, for 4500 tons of 60-pound rails for the extension from Fayetteville to Clarkton, N. C., 45 miles.

The Citizens' Light & Transit Co. of Pine Bluff, Ark., proposes to purchase new rolling stock, according to a dispatch.

The Baltimore & Ohio Railroad has recorded an equipment mortgage of \$10,000,000 at 4 per cent., covering 84 consolidation locomotives, 26 Atlantic locomotives, 1000 steel hopper cars, 2000 steel coke cars, 2000 steel underframe box cars, 1000 composite gondola cars, 500 ventilated box cars and 500 refrigerator cars. This equipment was ordered in October last, as previously reported.

The Chesapeake & Ohio Railway is reported to have ordered from the Pennsylvania Equipment Co., Philadelphia, Pa., 600 steel twin-hopper gondola cars.

The New Orleans & Northeastern Railroad has had built 10 box cars of 30 tons capacity at the shops of the Mississippi Central Railroad at Hattiesburg, Miss., and a report from Hattiesburg says that negotiations are under way to build 100 more cars for the same railroad. Several hundred cars for that line were repaired and rebuilt at the Hattiesburg shops during the past year.

The Colorado & Southern Railway is reported in the market for 500 gondola cars, 300 box cars, 250 stock cars and 15 cabooses, all standard gauge, besides 175 box cars and 50 coal cars, narrow gauge.

The Missouri Pacific Railway is reported to have ordered from the American Car & Foundry Co. 100 gondola cars of 50 tons capacity.

The North Texas Lumber Co., according to a press report, has ordered six logging cars from the Marshall (Texas) Car Wheel & Foundry Co.

According to market reports, cars will be purchased by several companies as follows: Missouri Pacific, 2650 freight; Louisville & Nashville, 1000 freight; Southern Pacific, 200 passenger; Union and Southern Pacific, 5700 freight; Southern Railway, 3000 freight; Rock Island, 1500 freight; Chesapeake & Ohio, 900 freight.

The Pennsylvania Railroad, according to a press report, will sell a large number of its wooden passenger cars, which have been replaced by steel cars.

The Roanoke Railway & Electric Co. of Roanoke, Va., has ordered from the J. G. Brill Company of Philadelphia four semi-convertible cars, each 41 feet long.

The Atlantic Coast Line is reported to have ordered 2600 tons of bridge steel from the Virginia Bridge & Iron Co. at Roanoke, Va.

The American Bridge Co. of New York is reported to have orders for bridge steel as follows: Baltimore & Ohio, 350 tons; Western Maryland, 200 tons; Norfolk & Western, 500 tons.

The Chesapeake & Ohio Railway is reported to have ordered 100 tons of bridge steel from the Phoenix Bridge Co., Phoenixville, Pa.

The Virginia Bridge and Iron Works, Roanoke, Va., is reported to have received an order for 500 tons of bridge steel for the San Antonio & Aransas Pass Railway, and the Norfolk & Western Railway has also placed a contract there.

Cherryvale, Oklahoma & Texas.

S. M. Porter, president of the Cherryvale, Oklahoma & Texas Railway Co., writes that the proposed line is 300 miles long, and will connect Caney, Kans., with Geary, Okla.; also Caney by another line with Fayetteville, Ark. The country is generally level. The other officers are: Vice-president, Reuben Gubbay, 16 Place Vendome, Paris, France, and J. V. de Raymond is foreign secretary at the same address. The American secretary is A. W. Shulthis, Independence, Kans.; treasurer, R. E. Wade, Perry, Okla.; general manager, J. H. Brewster, Independence, Kans.; chief engineer, B. J. Dalton, Lawrence, Kans. The directors include Messrs. Porter, Brewster and Wade, besides Geo. A. Masters and F. D. Brewster. A map shows that it is projected to continue the line from Geary via Mangum, Okla., and Childress, Tex., to El Paso, Tex., with a line branching off from Childress via San Antonio to Aransas Pass. Another branch is projected from Pawhuska, Okla., to South McAlester, Okla.

This road has been projected for several years, but it was lately reported that the plan had been financed in Europe.

Altus, Okla., to Wellington, Tex.

President J. A. Kemp of the Wichita Falls route, Wichita Falls, Tex., advises the MANUFACTURERS' RECORD that the company is preparing to build a branch line from a connection with the Wichita Falls & Northwestern Railway at Altus, Okla., to Wellington, Tex., about 60 miles. He also confirms the report that the Altus, Wichita Falls & Hollis Railway Co. has been chartered in Oklahoma to build that part of the road (about 45 miles in length) lying in that State. The Texas portion is incorporated as the Wichita Falls & Wellington Railway, and covers the 15 miles from the Oklahoma boundary to Wellington, Tex.

Continuing, Mr. Kemp writes: "We have acquired about 45 miles of the road heretofore constructed by the Altus, Roswell & El Paso Company. This construction will be financed by the Wichita Falls & Northwestern Company, and will be a branch line known as the Panhandle division of that company. Contract for construction of the road is now being let, and we expect to complete same during the next six months."

"The road will serve a very densely populated country that is now without railroad facilities, and will be an important feeder to the Wichita Falls & Northwestern Company."

"The officers of the company are as follows: J. A. Kemp, president; Frank Kell, vice-president and general manager; Wiley Blair, secretary and treasurer; R. A. Thompson, chief engineer."

Frisco Merges Several Roads.

The St. Louis & San Francisco Railroad Co., according to an official announcement, has completed arrangements to retire \$7,500,000 of its 5 per cent. notes maturing next January, but which will be redeemed on July 1 of this year to enable the fulfillment of plans to consolidate some subordinate properties in the system, namely, the Colorado Southern, New Orleans & Pacific Railway, the Beaumont, Sour Lake & Western Railway, the Orange & Northwestern Railway and the St. Louis, Brownsville & Mexico Railway, the latter having been lately purchased. When these are combined they will constitute the New Orleans, Texas & Mexico division of the St. Louis & San Francisco system. For this combination an issue of \$26,000,000 of 5 per cent. bonds is to be floated, but \$24,000,000 more may be issued in the future on the same division.

The first-named amount of these new securities, and which will be immediately issued, are to retire existing mortgages and to pay off indebtedness of the several lines merged, which will have a total length of 959 miles.

Santa Fe's Texas Work Progressing.

A press report from Galveston, Tex., quotes W. B. Storey, Jr., vice-president, and formerly chief engineer, of the Santa Fe system, as saying that the company will soon have 500 miles of new line in Texas. The completion of the connection between Texico and Coleman will give the Santa Fe a short route from Galveston to San Francisco. This new link is about 250 miles long, and the grading on it is about three-quarters finished. When all is completed tracklaying will be pushed at the rate of a mile a day. Now only 20 miles are laid. He estimates that about two months will be required to complete the grading.

Construction of the branch between Lometa and Eden is progressing, and will be pushed as rapidly as conditions permit. This will be about 100 miles long. The rest of the 500 miles will be made up by the San Angelo branch and the extension from Lubbock, Tex., southwest.

Cullman Railroad Not Sold.

The Cullman Coal & Coke Co., Cullman, Ala., telegraphs the MANUFACTURERS' RECORD that the company's railroad has not been sold, and never will be. This denies press dispatches, which stated that the line had been bought by the Louisville & Nashville Railroad Co. and the latter would complete the line, which is about 25 miles long from Cullman to Bremen, and on which considerable construction has been completed.

W. L. Mapother, vice-president of the Louisville & Nashville Railroad, is quoted as also denying the report, with the explanation that the Louisville & Nashville agreed to lay the track on the proposed line at the expense of the Cullman Company, but beyond this arrangement there are no relations, present or prospective.

Fitzgerald-Ocilla Electric.

A letter to the MANUFACTURERS' RECORD says that actual construction has begun on the Fitzgerald & Ocilla Electric Railway to connect Fitzgerald and Ocilla, Ga. The line will cover the principal streets and drives in Fitzgerald to the Atlanta, Birmingham & Atlantic Railroad shops. It is to be pushed to completion, and midway between the two places a lake and park will be developed for a summer and winter resort. S. Tilden Holtzendorff, banker, 61 Fifth avenue, New York, is president of the enterprise, and it is stated that he financed it. The other officers are Elmer T. Morris, first vice-president, 90 West street, New York; D. B. Jay, second vice-president; C. A. Holtzendorff, secretary, and W. A. Heller, treasurer, all at Fitzgerald, Ga.

Oklahoma City to Fort Worth.

Thomas J. Dulaney, Cornish, Okla., writes the MANUFACTURERS' RECORD that a bonus of \$15,000 has been raised there for the first railroad which will build to the town. He says that several propositions have been made by different parties, but they do not claim to represent any trunk line. There is a strip of country 60 miles wide and 200 miles long between Oklahoma City and Fort Worth which needs a railroad, and Mr. Dulaney says that these two cities are destined to become packing centers. The route between them would be over a gently rolling prairie country, and a railroad could be constructed at moderate cost.

Southern Pacific Office Building.

Thornwell Fay, vice-president of the Southern Pacific Lines at Houston, Tex., is quoted as saying that the company will erect there a nine-story office building fronting 145 feet on Franklin avenue and running back 175 feet on Travis street. It will be on the site of the Hutchings House block. The building will be fire-proof, and plans are being prepared.

Contracts for the hospital to be erected on the banks of White Oak Bayou in the Fifth ward are to be let immediately.

A Kentucky Electric Road.

J. D. Richardson & Son, White Mills, Ky., write that it is proposed to build an electric railway connecting Elizabethtown and Bowling Green, Ky., via Cecelia, Stephensburg, White Mills, Millerstown and Mammoth Cave. The principal freight will be coal, asphalt and timber, but the line will run through a good agricultural district. The route parallels a stream for 40 miles, and water-power will be used to generate electricity for operating.

May Build Port Facilities for Coal.

The officers of the Carolina, Clinchfield & Ohio Railway, according to press reports from Savannah, Ga., have been investigating harbor facilities at that port with a view to coal shipments from the Clinchfield mines. They have also visited Jacksonville, Fla., for a similar purpose, and it is expected that some new terminal facilities for the handling of Clinchfield coal will be erected at Savannah and perhaps also at Jacksonville.

Car Floats and Barges.

The Pennsylvania Railroad Co., it is reported, has ordered from the New York Shipbuilding Co. two standard steel car floats, each 250 feet long, and it has also ordered from Wm. Cramp & Sons of Philadelphia four standard steel car floats 145 feet long.

The New York, Philadelphia & Norfolk Railroad, it is reported, has ordered from the New York Shipbuilding Co. a steel harbor barge.

An Alabama Barge Line.

A dispatch from Montgomery, Ala., says that arrangements have been made by the Chamber of Commerce, of which Nathan Lobman is president, and the Wholesale Grocers' Association to establish an independent barge line from Montgomery to Mobile, and that six barges will be employed. More than \$30,000 of subscriptions have been received. A total of \$50,000 is all that is required.

Street Railway to Be Sold.

C. L. Byrne, receiver of the Ardmore Traction Co., Ardmore, Okla., announces that he will sell at private sale through sealed bids, for cash, on May 2, all property of the company, which includes 4.7 miles of railway in operation, tracks and equipment and considerable material for track and overhead work, besides other real estate. The franchise is for 50 years.

Contract Closed for Rails.

R. C. Hoffman & Co. of Baltimore, Southern sales agents of the Maryland Steel Co., announce that they have contract with the Raleigh & Southport Railroad, of which John A. Mills of Raleigh, N. C., is president, for 4500 tons of 60-pound rails to be used on a 45-mile extension from Fayetteville to Clarkton, N. C., at which latter point connection will be made with the Seaboard Air Line. Construction work is to begin immediately, financial arrangements having all been perfected.

GOOD ROADS**WEEK'S HIGHWAY RECORD.**

Progress in Southern Road and Street Improvement.

[Full details of highway undertakings are given in the Construction Department.]

Bonds Voted.

Chatham, Va.—City Council adopted resolution to issue \$10,000 of bonds for street improvements.

Colonial Beach, Va.—City voted \$10,000 bond issue for street improvements, etc.

Lonsdale, Tenn.—City authorized \$30,000 bond issue for street and school improvements.

Bonds to Be Voted.

Abingdon, Va.—Washington county will vote on issuing \$300,000 of bonds for road construction.

Dalton, Ga.—City will vote on issuing \$5,000,000 of bonds for street paving.

Huntington, W. Va.—City votes May 3 on issuing \$300,000 of bonds for street improvements.

Shawnee, Okla.—City considering election on issuing \$200,000 of bonds for constructing boulevard.

Taylor, Tex.—Williamson county votes March 22 on issuance of \$200,000 of bonds for macadamizing about 100 miles of road.

Contracts Awarded.

Athens, Tenn.—City awarded contract for constructing 15 miles of road.

Cleburne, Tex.—City awarded contract for laying 2000 square feet of cement sidewalk.

Dothan, Ala.—City awarded contract at about \$50,000 for nine blocks of vitrified brick paving.

Houston, Tex.—Shu City Land Co. awarded contract for 27 miles of grading.

Jacksonville, Fla.—City awarded contract for grading and laying 1120 linear feet of black hexagonal tile sidewalk.

Lynchburg, Va.—City awarded contract at about \$33,000 for granite block paving on concrete foundation.

Oklahoma City, Okla.—City awarded three contracts for street paving; total, about \$380,000.

Orange, Tex.—Orange county Commissioners awarded contract at about \$1400 for concrete sidewalk and street curbing around courthouse square.

Palatka, Fla.—Putnam county awarded contract for constructing six miles of road.

Pensacola, Fla.—Board of Public Works awarded contract for 635,000 square feet of concrete sidewalks.

Waco, Tex.—City awarded contract at about \$50,000 for vitrified brick paving.

Contracts to Be Awarded.

Anderson, S. C.—Anderson Traction Co. will expend \$2100 for laying cement cross-ties and paving with brick over ties.

Attalla, Ala.—City opens bids March 21 for cement sidewalks, curb and gutter to cost about \$100,000.

Clarksville, Ga.—City will macadamize street and construct brick or concrete sidewalk.

Dothan, Ala.—City opens bids March 21 for 210,000 square feet of sidewalk and 36,000 linear feet of curb and gutters.

Houma, La.—City will invite bids for constructing one mile of concrete sidewalks.

Lake Charles, La.—City opens bids March 28 for about seven miles of sidewalk and curb.

Lake Charles, La.—City opens bids March 28 for constructing seven miles of cement sidewalk and curb.

Landrum, S. C.—City will improve sidewalks.

Manchester, Va.—City opens bids March 18 for constructing 8000 square yards of concrete sidewalks and curbing.

Marianna, Ark.—City has ordered esti-

mate on cost of paving four blocks with vitrified brick.

Montgomery, Ala.—Montgomery county opens bids March 21 for regravelling 12 miles of road and graveling two miles of road.

Parkersburg, W. Va.—City opens bids March 24 for paving four blocks of street.

Raleigh, N. C.—Wake county opens bids April 4 for grading and macadamizing.

Richton, Miss.—Aldermen authorize Street Commissioner to pave 1000 feet of sidewalk with concrete.

Winston-Salem, N. C.—Forsythe county will construct macadam road.

Georgia Cement Gravel.

In an enthusiastic article in the *Savannah Press* dealing with the fine gravel roads of Chatham county, Mr. F. H. Oppen, president of the Southern Paving Gravel Co. of Savannah, says that Savannah has gained distinction as an automobile center because of the hard-surface roads of cement gravel in the county, aggregating about 100 miles in length. The gravel used is composed, he says, of about 80 per cent. rounded quartz pebbles and fragments and 11 per cent. fine binder, the latter being essentially kaolin and limonite. He says that the road gravel is found in an immense watershed on the northern bank of the Savannah River, four miles below Augusta, at a depth of 28 feet, and providing sufficient road material to solve a hard-surface road problem in the Savannah section for a generation to come. The deposit is the property of Mr. Oppen's company, which during the past seven years has shipped more than 10,000 carloads of the material to different parts of the South.

Advertising.

The Chamber of Commerce of Washington, N. C., is, according to Secretary A. C. Hathaway, going into more modest quarters with a view to having a fund for advertising. As a starter, Secretary Hathaway makes some pertinent points in the *Daily Messenger* of that city. He says:

"Last year we expended upward of \$3000 right here in this town among ourselves. This may have been a wise expenditure. Of course, we felt good over it. It was a source of gratification for us to get together in our magnificent room, glance around at each other and say: 'Look what we are doing; not another town in the United States of our size doing so much.'"

But Mr. Hathaway says all that is not worth the talking; what is needed is to let other folks know, and the way to let them know is to advertise. Of advertising he says:

"We can't sit still, put our candle under a bushel and expect wayfarers to see our light."

"We must mark out a path leading to Washington, then brightly light our candles, that those far away may be attracted."

"The world does not know of our advantages, and it is up to us to tell them."

"What we must do is all pull together and back up a crusade of advertising, and we will gain people of wealth who will come among us."

Mr. Hathaway's argument in brief is this: A community cannot advertise itself by making known to itself its own advantages. It must make the facts known in other quarters. The man is yet to be born who can lift himself by his own bootstraps.

It is reported that J. T. Fuller and associates of Villa Rica, Ga., will build a knitting mill.

TEXTILES

Correspondence relating to textile matters, especially to the cotton-mill interests of the South, and items of news about new mills or enlargements, special contracts for goods, market conditions, etc., are invited by the *MANUFACTURERS' RECORD*. We shall be glad to have such matters at all times, and also to have any general discussion relating to cotton matters.

The Glencoe Cotton Mill.

The Glencoe Cotton Mill of Columbia, S. C., has plans and specifications for the construction of its buildings, and expects to award contract by April 1. This company will install 5000 spindles driven by 225 electrical horse-power on the manufacture of cotton twine and warp. It was reported organized some weeks ago, and will expend \$115,000 for buildings and machinery. Shand & La Faye of Columbia are the engineers in charge. T. H. Wanamaker of Orangeburg, S. C., is president, and Geo. M. Berry of Columbia is vice-president.

The Bradford Worsted Mill.

The Bradford Worsted Spinning Co. of Louisville, Ky., is progressing with the construction of its plant. Its main building will be of fireproof construction, four stories high, with a floor space of 80x280 feet, 40x88 feet for the woolen-room, 40x90 feet for the wool-scouring room, 40x50 feet for the machine shop. Engine and boiler rooms will also be provided. It is understood that contracts have been awarded with English manufacturers for about \$120,000 worth of machinery for manufacturing woolsens, and that this equipment will be in position within 60 days.

The Cotton Movement.

In his report for March 11 Col. Henry G. Heister, secretary of the New Orleans Cotton Exchange, shows that the amount of cotton brought into sight during 192 days of the present season was 8,764,057 bales, a decrease under the same period last year of 2,735,800 bales. The exports were 4,623,582 bales, a decrease of 1,110,216 bales. The takings were, by Northern spinners, 1,665,796 bales, a decrease of 437,244 bales; by Southern spinners, 1,530,626 bales, a decrease of 26,730 bales.

The Bell Hosiery Mill.

The Bell Hosiery Mill of Suffolk, Va., is now in full operation, the plant having been completed some weeks ago. This company has 20 ribbers, 20 footers, 5 loopers, drying machine, 50-horse-power boiler and 120-horse-power engine to drive the knitting equipment, and a 12-horse-power engine to drive the 150-light dynamo for lighting by electricity. The daily output is 200 dozen pairs of misses' ribbed hose. R. H. Rawles is president and James L. Bell general manager.

The Republic Cotton Mills.

The Republic Cotton Mills of Great Falls, S. C., is proceeding steadily with the erection of its 25,000-spindle and 1000-loom plant, detailed some weeks ago. It is understood the company will soon begin to plan the two additional mills of about 75,000 spindles and looms to match.

The Blue Ridge Mill.

The Blue Ridge Hosiery Mill of Landrum, S. C., will build an addition to double capacity. It now has 112 knitting machines, steam-power equipment, dyeing and finishing plant, etc.

The Palmetto Hosiery Co.

The Palmetto Hosiery Co. of Jonesville, S. C., has been chartered with a capital stock of \$75,000 and J. J. Littlejohn president-treasurer. This company will install 100 knitters, 20 loopers, 20 ribbers and a

Corliss steam engine, for the production of fine half-hose. The daily capacity will be 750 dozen pairs, and about 200 operatives will be employed.

The Panola Mill.

The Panola Cotton Mill of Greenwood, S. C., is understood to have completed arrangements for the erection of its plant, reported in January. This company organized with a capital stock of \$300,000, and plans a mill of 10,000 spindles and 300 looms. F. S. Evans is president.

The Stanley Manufacturing Co.

H. A. Rhyne of Gastonia, N. C., has purchased the Stanley Creek Cotton Mill of Stanley's Creek, N. C., at \$52,000, and will organize the Stanley Manufacturing Co. to put the plant in operation. This mill has 4160 ring spindles.

The Estelle Cotton Mill.

Messrs. W. R. Meadows of Starkdale, Miss., and E. W. Pettus of Selma, Ala., have purchased the Estelle Cotton Mill of Selma at about \$64,000. They propose the organization of a new company to operate the plant.

The Lowe Manufacturing Co.

The Lowe Manufacturing Co. of Huntsville, Ala., is reported to have contracted for an 80x144-foot addition and 300 looms to cost \$100,000, instead of the 80x96-foot addition and 200 looms lately announced.

Woman and the Trades. Pittsburg, 1907-1908. By Elizabeth B. Butler. Publisher, Charities Publication Committee, New York. Price \$1.50 net.

Under an appropriation of \$7000 by the trustees of the Russell Sage Foundation for the survey of industrial conditions at Pittsburg, the plan to make a careful and fairly comprehensive study of the conditions under which working people live and labor in a great city was carried out in 1907 and 1908. The results will be embodied in six volumes, of which Miss Butler's is the first. It embodies the findings of a year of tense inquiry among employers, foremen and operatives as to the conditions of 22,000 women wage-earners in the city. She discusses canning, confectionery, cracker, stogy, lamp and glass factories, the metal and garment trades, laundries, dyeing and cleaning, printing, broom, brush and paper-box making, telephone and telegraph operation and office work, workers and workrooms and the social life of working women inside and outside the factories. To such discussion is added a summary of industrial conditions as to wages, hours, health and economic foothold, while appendices show the plan and methods of study and illustrative tables. The work is a piece of first-hand investigation which is worthy of careful reading by everybody interested in the welfare of all the workers of the country.

Paul U. Kellogg is editor of this series, and will write the sixth volume, summarizing the Pittsburg survey. The other volumes will be a general one by John R. Commons, Robert A. Woods, Charles M. Robinson and others, one on the steel workers by John A. Fitch, one on Homestead by Margaret F. Byington and one on work accidents and workmen's compensation by Crystal Eastman.

It is reported that J. T. Broadbent of Brooklyn, N. Y., is planning the erection of a cotton-cloth mill at Columbus, Ga.

The Vance Cotton Mills of Salisbury, N. C., contemplates the construction of the addition mentioned last week and the installation of twisting spindles. The company now has 10,000 ring spindles.

MINING

BIG DEVELOPMENT IN KENTUCKY

Wisconsin Steel Co. Will Expend \$500,000 for Plant in Harlan County.

[Special Dispatch to Manufacturers' Record.]
Big Stone Gap, Va., March 14.

The Wisconsin Steel Co., which is subsidiary to the International Harvester Co. of Chicago, is planning to begin the development of a portion of 20,000 acres of coal and timber land it controls in Harlan county, Kentucky, a few miles from Big Stone Gap. The mines are to have a daily output of 2000 tons of coal, and will be equipped with electrical machinery and other modern mining facilities. There will also be constructed 300 coke ovens with a daily capacity of 600 tons of coke. These facilities for coal mining and coke manufacturing are estimated to cost about \$500,000. Sawmills will be installed for manufacturing the lumber for construction purposes. The company is in the market for sawmills and woodworking machinery, and later will purchase boilers, engines and electrical machinery. W. C. Tucker, Hotel Touraine, Big Stone Gap, is in charge, and all communications should be addressed to him.

Concrete Gravel Again.

Editor Manufacturers' Record:

In order to answer all inquiries about concrete gravel at once, I will have to draw on your kindness and forbearance and ask you to print in the MANUFACTURERS' RECORD, in answer to all the inquiries elicited by my small note last week about said gravel. They come in letters from Maine to Georgia.

Let me say, first, that I have no personal interest in the gravel in McLennan county, Texas, no further than to make known this element as one of the resources of our county, in order that somebody might be induced to promote this enterprise.

The land on which these gravel beds are found sells from \$50 down to \$15 an acre.

The most of the gravel, and perhaps the best of it, is on the Basque River and its tributaries. Gravel is also found along the Brazos River. This river has appropriations from Congress to improve its navigation as far as Waco.

Waco is a city of 30,000 inhabitants. It is situated near the center of the State of Texas, on both banks of the Brazos River. Waco has the following railroads: The Houston & Texas Central, the Missouri, Kansas & Texas, the Cotton Belt, the Texas Central, the San Antonio & Aransas Pass and the International & Great Northern. The Santa Fe Railway passes through the western side of the county.

The depth or thickness of the gravel is from 2 to 30 feet, not a great deal of earth above it, sometimes none.

There is a great quantity of the gravel. I cannot estimate it in acres. There is also much common gravel, not mixed with the concrete element. The gravel varies in size from the pebble, just over sand size, to the size of an egg.

You might get in correspondence with owners of the gravel and get samples. I am a surveyor, and cannot take stock in a gravel company.

The good-roads movement is interesting all Texas, and there is a fine rich agricultural country around Waco, extending into many counties. The demand for road-building material will be increasing from this time forward.

There is in Waco one sand and gravel company, for the purpose of getting up the gravel for shipment in a small way,

but would not interfere with such a plant as you propose.

By concrete gravel I mean a gravel with the concrete element mixed by nature in the beds, so that when applied for capping the road will harden after rolling and mastering (by rainfall) will become hard and waterproof. There is nothing else needed to be put with it. These roads will last.

ANDREW GODDARD.

Waco, Tex.

Pocahontas Coal Selling Plans.

The new selling plans for Pocahontas coal, as announced in these columns in November last, become effective April 1, 1910. The three leading selling agencies—the Pocahontas Fuel Co., the Crozier-Pocahontas Co. and the Pocahontas Coal Sales Co.—have perfected their organization and opened up their offices at strategic points and shown considerable activity in getting the details well in hand to handle the large tonnage of the various mines controlled by each interest. Each has opened up in its own way a broad campaign of active personal work, reinforced by advertising, to set clearly before fuel users the facilities in producing, preparing and distributing the output at their command. There is good reason to believe that the high reputation which the Pocahontas fuel, based upon its high quality and intrinsic worth it has attained, will be still further extended through the activities of the new forces at work in its behalf, supplementing and extending the work hitherto done by Messrs. Castner, Curran & Bullitt, who are still in the field, and will continue to handle a considerable tonnage of Pocahontas coal under the trade-mark name "C. C. B." Pocahontas, which they have used for years. Pocahontas coal has been made the standard for grading all steam fuel by the United States Geological Survey, and is the only American coal officially endorsed by the governments of Great Britain, Germany and Austria, being used by the navies of these and other governments, while the United States Navy has used for years a very large tonnage, as is also true of many of the leading steamship lines. Thus the reputation of Pocahontas coal is firmly established upon merit and quality, and this is the foundation upon which a still wider appreciation of its advantages will result from the forces now working in its behalf. The Pocahontas Fuel Co. is marketing its production under the trade-mark name of "P. F. C." original Pocahontas, and ships from its mines over the N. & W. R. R., reaching tidewater at Lambert's Point, Norfolk.

This company has established headquarters at 1 Broadway, New York, with branch offices at Bluefield, W. Va.; Norfolk, Va.; Boston, Mass.; Chicago, Ill.; Cincinnati, O., with Messrs. Watts, Watts & Co. as its London agents.

The Crozier-Pocahontas Co. has opened its headquarters in the North American Building, Philadelphia, Pa., with branch offices at Boston, Mass.; Chicago, Ill.; Norfolk, Va.; Bluefield, W. Va. Its production is being marketed under the trade name of Pocahontas coal. The Pocahontas Coal Sales Co. has adopted the trade name of "Pioneer" Pocahontas coal, and has its headquarters in the Union Trust Building, Cincinnati, O., with branches in Chicago and Norfolk.

The Four States Coal Co.

It has been announced that the various interests of John H. Jones, president of the Pittsburg-Buffalo Coal Co. of Pittsburg, and associates will be merged into the Four States Coal Co. This merger will include the Big Hill Coal Co. and the Monarch Coal Co., both with offices in Cincinnati, and the new corporation will develop properties in Ohio, Pennsylvania,

West Virginia and Kentucky. These properties include mines at Elkins, W. Va.; Richmond, Ky.; on the Wheeling & Lake Erie Railroad in Ohio, and lands, plants, etc., in Pennsylvania. The Pittsburg-Buffalo Coal Co. will continue to operate as a separate corporation, with John H. Jones as president, all the companies having their offices in the Frick Building at Pittsburg. Harry P. Jones will be in charge at Cincinnati. The Four States Coal Co. was incorporated in January with a capital stock of \$5,000,000, and is now developing 6100 acres of land in Marion county, West Virginia. It plans an expenditure of \$1,500,000 on this property to provide for an annual output of 1,000,000 tons of coal. Its improvements will include the construction of a complete mill town with water supply, electricity for lighting and power, sewerage system, miners' dwellings of brick, with bathrooms and electric lighting, on 50x100-foot lots, etc. Complete details of this West Virginia operation were announced by the MANUFACTURERS' RECORD in December.

The Clinchfield Fuel Co.

The Clinchfield Coal Corporation, Dante, Va., has formed a selling organization under the name of the Clinchfield Fuel Co., for the purpose of marketing its entire output.

The main offices of the selling company will be located at Spartanburg S. C., in charge of L. S. Evans as general manager. Mr. Evans was formerly general manager of the Atlantic States Coal & Coke Co., Richmond, Va. The Atlanta and Charlotte offices will be under the direct control of the Spartanburg office.

Walter F. Ray, formerly connected with the Government, has been engaged as fuel expert, and will closely study the conditions existing in the plants of large coal consumers, for the purpose of enabling them to get the best results from the use of Clinchfield coal.

It is estimated that the selling organization will have an initial output of about 2,000,000 tons to dispose of.

Will Export Coal from Norfolk.

It is announced that beginning April 1 the Virginia Iron, Coal & Coke Co. of Bristol, Va.-Tenn., will engage in the general export of coal, coastwise and foreign, from Norfolk. The company handles the Toms Creek coal, mined principally in Wise and adjacent counties of Southwest Virginia, and will begin its export trade with contracts aggregating about 700,000 tons. Its president is Henry K. McHarg of New York. Its Norfolk office will be at 500 Dickson Building, Gordon DeCordy in charge.

Wagon Oak Exporters Meet.

Members of the Wagon Oak Exporters' Association, of which Harvey M. Dickson of Norfolk is president, met at Roanoke last week for the purpose of discussing subjects of interest to the industry. It is the endeavor of the association to establish uniform inspection rules and to bring the quality of all export material up to a standard where it will pass inspection in foreign ports.

Conservation.

The Great Southern Lumber Co. at Bogalusa, La., is preparing to utilize in its pulp mill slabs and odds and ends of tree limbs that have heretofore gone to waste. The sawdust is used for fuel now. With the pulp mill in operation it is calculated that pretty nearly 100 per cent. of each tree cut for lumber will be utilized.

About \$50,000,000 is invested in business concerns in Galveston, Tex.

LUMBER

[A complete record of new mills and building operations in the South will be found in the Construction Department.]

Southern Retail Dealers.

At a meeting of the Retail Lumber Dealers' Association of West Tennessee and Kentucky at Memphis last week there was organized the Southern Retail Lumber Dealers' Association, embracing Alabama, Louisiana, Tennessee, Kentucky, Mississippi and part of Arkansas and Missouri. Officers for the new association were elected as follows: S. B. Enochs, Jackson, president; C. H. Sherrill, Paducah, Ky., vice-president; R. P. Bransford, Union City, Tenn., secretary and treasurer.

The fourth annual convention of the Retail Lumber Dealers' Association of Alabama, Georgia and Tennessee was held at Birmingham, the principal feature of the meeting being a discussion of the amalgamation of the association with the Southern Retail Lumber Dealers' Association. No definite action was taken, but it is said to be quite probable that the proposed amalgamation will be consummated. The following officers were elected: President, B. Crawford, New Decatur; vice-president, W. M. French, Knoxville; secretary and treasurer, Richard Randolph, Birmingham.

A Mississippi Timber Deal.

The Progress Lumber Co., which is operating a sawmill at Stoner, Miss., a few miles from Columbia is reported to have purchased from G. H. Hawkins of Hattiesburg his timber holdings on the New Orleans Great Northern Railroad. This property, it is stated, was formerly owned by the Hurricane Creek Lumber Co., and is estimated to contain 23,000,000 feet. It is understood that the company will make other purchases in the same locality, increasing the stumpage to 40,000,000 feet, and will establish a large plant at Hickman to facilitate its development.

Purchase Timber Holdings.

A dispatch from Homerville, Ga., states that capitalists of Clarke and Ware counties have purchased large holdings of timber and timber lands from H. J. Pegler, W. T. Dickerson and others, and will install a modern sawmill to develop the property. The purchasers will incorporate the Georgia Lumber & Turpentine Co., with a capital stock of \$200,000, and will establish a plant about one mile from Homerville. It is understood that the company will also engage in turpentine and other operations.

Lumbermen at El Paso.

At the sixth annual convention of the Lumbermen's Association of West Texas, New Mexico and Arizona at El Paso last week the following officers were elected for the ensuing year: George W. Frenger of Las Cruces, president; Robert Black of Deming, vice-president; R. A. Whitlock of El Paso, secretary and treasurer.

Shipments from Gulfport.

Lumber shipments from Gulfport, Miss., during February amounted to 23,356,000 feet board measure and 3991 creosoted ties, the total value being estimated at \$537,205.

Lumber Notes.

The report of the building inspector of Greensboro, N. C., shows that the value of building operations in that city during 1909 amounted to \$331,530.

Renfro & Williams of Jacksonville have completed their new planing mill and woodworking plant and have put them in operation. They will make a specialty of fancy-turned woods and other products for structural purposes.

MECHANICAL

The Sturtevant Ring-Roll Mill.

Equipments for crushing materials are required in various branches of industrial activity. Their design and construction has been given the attention of expert

pressed rolls are adjusted to crush at from 20,000 to 40,000 pounds pressure (more or less, as is found effective). This is greater than the track pressures of locomotive wheels, and the high-power steel axles of the Sturtevant mill are stronger. These elastically and equally-pressed rolls are balanced and pass over iron or uncrushable

almost nil in all grinders of this class, and because Sturtevant rolls do not slip, wear of these, too, is of slight consequence. This mill cannot be clogged, however rapid the feed may be. As there is a constant feed while the mill is at work of coarse and partly-reduced material, so there is a constant drop of material crushed off of

thereon by centrifugal force, and the hammer rolls strike the coarse, fresh rock down upon this coating, it is fair to assert that ring-roll mills almost completely compel rocks to crush one another. This they do with astonishing effectiveness. A ring is said by users to frequently last two, and on some materials is reported to endure even for three years before requiring replacement. The wear of either the ring or rolls is too small in this mill to be important, even when reducing very hard materials. A new ring and three rolls make an old Sturtevant mill new, because it has no shields or parts subject to wear. That Sturtevant parts have such extraordinary endurance is because they run with smallest friction. Friction means wear. There is no friction whatever between the wearing parts of the Sturtevant, because these rolls can never touch the ring, owing to the thick coating of rock thereon, and the rolls roll over the same with no drag or slip whatever. Rock has slight cutting effect on rollers that really roll, however hard the rock, and Sturtevant rolls can never slip or rub. They are large, and run over the rock on the ring as easily as carriage wheels. But unlike soft-iron tires, these surfaces are of hardest semi-steel, which has many times the endurance of vehicle wheels. It is a well-established fact that no other grinder has yet compared favorably in endurance or output with mills having the vertical ring that holds rock on it by centrifugal force, and crushes by the enormous pressure of tolls running free and clean. In a Sturtevant mill the rocks are pulled under the rolls. The rolls are not drivers, but are driven by the material on the ring as it is drawn

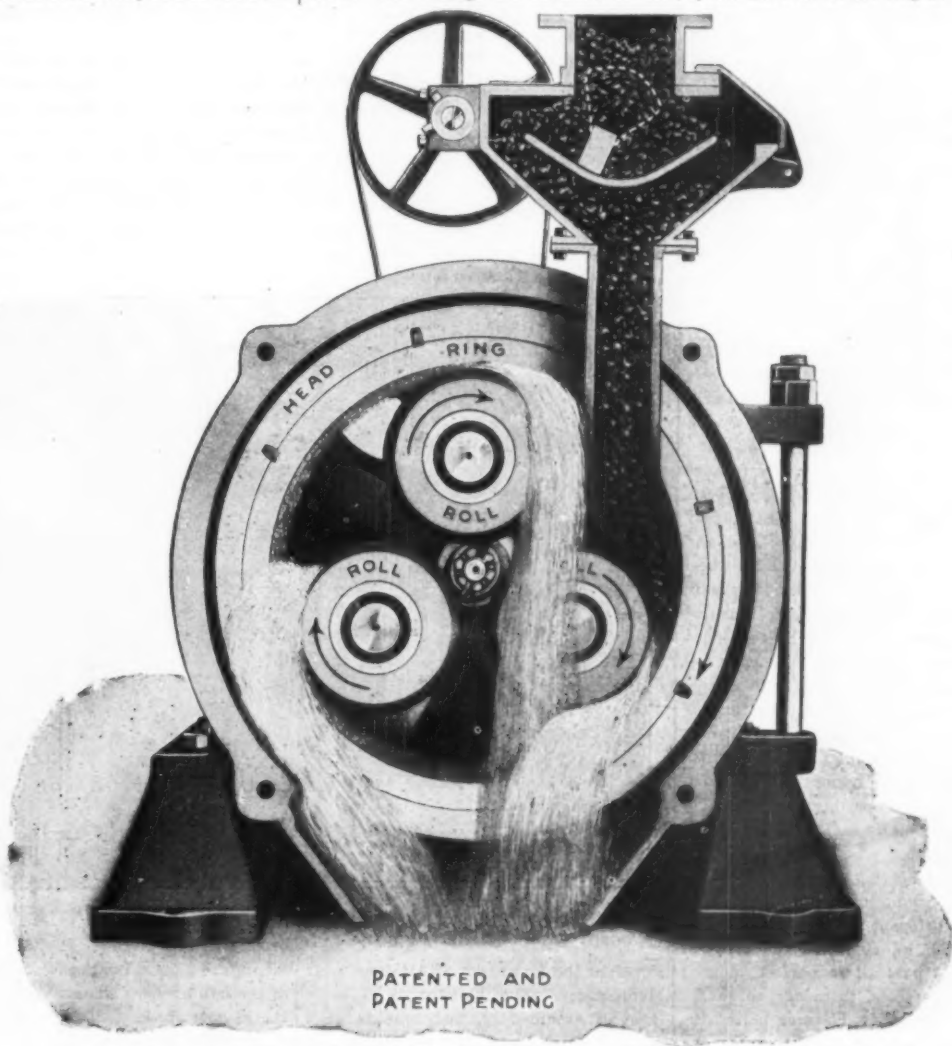


STURTEVANT RING-ROLL MILL.

engineers and manufacturers, among whom is the Sturtevant Mill Co. of Boston. This company has had 30 years' experience in the production of crushing and grinding machinery, and one of its specialties is the vertical ring-roll mill, illustrated by two accompanying views. The Sturtevant ring runs on free rolls. The ring is the driver, and its rolls run as free as those of an automobile's roller bearings. There are no roll drives. Describing its vertical ring-roll mills the Sturtevant Mill Co. refers to them in part as follows: "Vertical ring and roller mills are grinding machines of unusual merit. They have an uncommonly wide range of work and an output which may be varied from eight mesh to such fine pulverizing as will pass 200 mesh (40,000 holes to the square inch). They reduce the hardest rocks and ores at surprisingly low cost, and are excellent grinders of many moderately hard and some soft substances difficult to grind in other machines. Cement clinker, phosphate rock, granite, quartz, trap ores, slag, limestone, lime, etc., are among the numerous materials successfully ground in ring-roll mills. In our machine a heavy steel ring, having a concave inner surface, is revolved vertically on a massive head carried by a horizontal shaft. Three convex hammer rolls are elastically pressed toward the inner face of the ring. Substances to be ground are taken from an ordinary crusher and fed steadily by the automatic feeder to the middle of the revolving concave of the ring (R) by way of the chute (S). The three convex-faced rolls (all set up by one adjusting screw on outside of door) are strongly and equally pressed by springs toward the revolving concave face of the ring. They are forced by frictional contact with material on the ring to roll over and pulverize it. The centrifugal force generated by ring rotations holds the material placed on the ring until it is crushed fine, and then the rolls crowd the fines off of both sides of the ring, and as fast as produced. When at work the concave of the revolving ring is always covered with a thick layer of material fed therein. A naked track is never exposed to the roll faces. Rock is crushed down upon itself (between anvil ring and hammer roll), producing a maximum of fines with least wear. The spring-

substances with shocks so completely cushioned that crystallization or breakage is prevented. No other rolls can be set to crush with greater pressures than these, no others run so smoothly and no shaft has

both sides of the ring by the rolls. This escapes to the bottom of the case, from whence it is taken to a Newaygo screen to remove the finished product as soon as made. The tailings are returned to the



STURTEVANT RING-ROLL MILL.

ever broken. Such simple and effective roll and ring action has not before been seen. Because the rolls cannot touch the ring, protected as its face is by the thick layer of material on it, wear of the ring is

ring (with fresh feed) for further reduction. Thus the mill is always grinding new material and producing a maximum output. As the ring's anvil surface is always protected by a thick covering of rock, held

between anvil ring and hammer roll. The whole front of the mill case opens like the massive door of a safe, and carries the rolls and all their parts entirely outside of the mill, exposing the whole interior. The

ring, the only working part left inside, can be quickly reached. When the door closes it swings the rolls back into the interior space of the ring, and then all are equally and elastically pressed by one screw on the outside of the door, and as strongly as is needed to crush at once any grindable material held on the ring. The ring discharges its rock on both sides of the concave track. Ability to open the door quickly often saves time, an important consideration

in the case of a museum of natural history. The Sturtevant mill feeder is simple and automatic, and the feed is regular—never in excess or deficiency. This obviously increases the output and causes steady running. The Sturtevant mill has only one belt, driven by a friction-clutch pulley. Its lever starts and stops the mill by the simplest of all movements. Sturtevant bearings are clean; no lubricant is wasted. No other ring and roll mill is so effectively

poses of a museum of natural history.

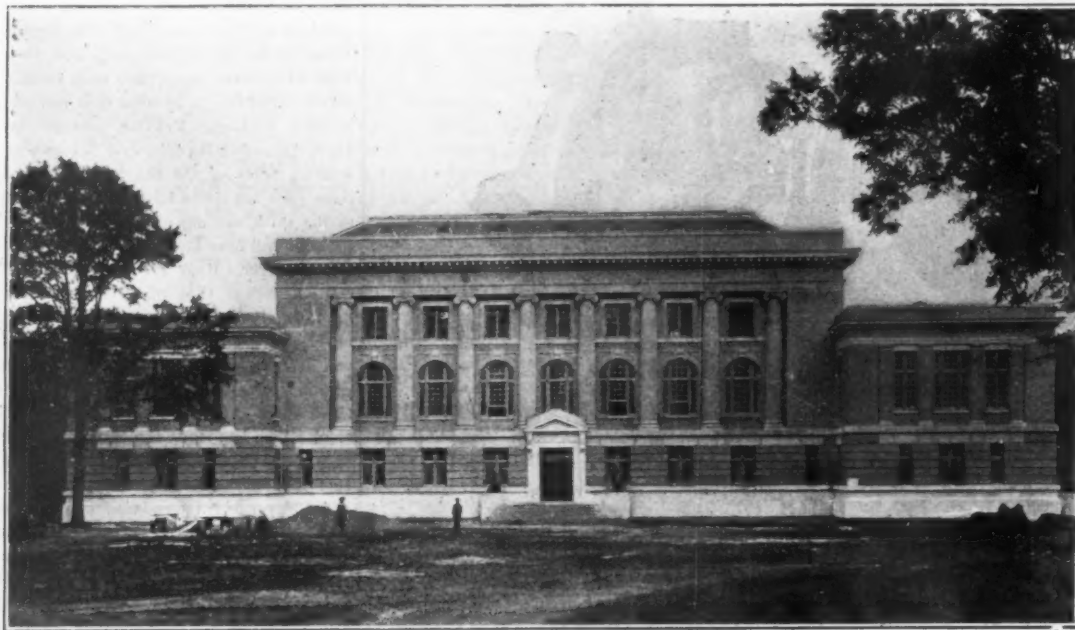
The north wing and two basement rooms are occupied by the Department of Biology. The space is suitably divided to provide laboratories and lecture-rooms for general biology, physiology, comparative anatomy, histology and embryology.

The south wing, with three basement rooms, contains the lecture-room and laboratory of the Department of Geology, and the offices, chemical laboratory and

history collections, in suitable cases, arranged between the windows, against the end walls and in the central part of the hall. A central skylight, 40x70 feet, and windows on both sides of the hall provide ample illumination.

The Park Electric Elevator.

The electric elevator is in large demand for installation in buildings of all kinds. There are several Southern companies which make a specialty of designing and manufacturing elevators, among them being the Park Manufacturing Co. of Charlotte, N. C., which also manufactures pumps and heaters and acts as a general machinist and founder in iron, brass and bronze. Herewith is an illustration of the company's improved elevator, being a full magnet-controlled alternating-current machine. The company says: "Direct-current machines with full magnet control have been quite common for some time for elevator service, but the recent electrical development has been altogether an alternating current, and hence the need of this new type. Our machine is one that meets the needs of this latest electrical de-



SMITH HALL, UNIVERSITY OF ALABAMA.

even in small works. The mill case has other openings, too, that are convenient. The three rolls are supported with abundant strength by the massive door. Each roll is swung into immense and equal elastic crushing pressures by its spring-actuated steel bell lever. The comparative strength of a Sturtevant mill is shown by its steel material weight. Either roll can be removed and replaced in a few minutes, because no shaft has to be disturbed. The rolls may be held away from the ring when the ring runs empty. This is a considerable advantage, because the naked surfaces of ring and rolls would otherwise at this time injure each other. The driving shaft carries only the weight of the parts which it revolves. It takes no crushing shocks. The roll pressures are exactly equal and opposite, and the stresses exactly balance and offset each other. The bearing of each roll is on both sides of it, and equally divided. The shaft is elastically hung, and is as large as a locomotive's driving-wheel axle, and of high-power steel. They have never broken. Immense elastic crushing force is applied to each bell lever at a point to swing and press its hammer roll with a force of from 20,000 to 40,000 pounds toward the ring and upon the material thereon, which is drawn between ring and roll by ring rotations. No crushable substance between anvil ring and hammer roll can escape instant reduction. Each roll runs on its shaft in a bath of oil supplied automatically through the shaft center. This bearing is absolutely dust-proof. Sturtevant rolls are exclusive features of Sturtevant mills, steady the revolving head, its ring and the material thereon, and hold all in perfect running balance. Therefore, there are no shocks given the ring shaft, however active the hammer rolls may be, because when one roll jumps (hammers) all the others give equal and opposite strokes toward the anvil ring. It is to this remarkably effective balanced hammer and anvil action that the large outputs are in no small degree due. Because the rollers act exactly like the roller bearings of an automobile axle,

lubricated. The gears are cut and encased from dust, and run in a bath of oil."

Smith Hall, University of Alabama.

Southern educational institutions are numerous, and their buildings are usually of such a character as to be extremely pleasing in appearance and well adapted to the purposes for which they are intended. Two accompanying photographic views illustrate Smith Hall, about com-

storage-rooms of the State Geological Survey.

The main or central portion of the building is the Museum of Geology and Natural History. On the first floor is the central or entrance hall, with stairway opposite the front entrance, used for the display of large specimens of iron ore, coal, limestone, fossil coal plants, etc. To the north of this hall are two large rooms separated by a cross-hall and used for



INTERIOR OF SMITH HALL.

pleted, at the University of Alabama, near Montgomery. This building is of Ionic style of architecture, and consists of a main or central part of three stories and basement, 110x60 feet, and two wings of two stories and basement, each 100x40 feet. The materials of construction were light-colored pressed brick, with columns, cornices and other courses of Bedford stone. In plan and dimensions it is one of the best-designed buildings for the pur-

laboratories for mineralogy. To the south of the hall are two similar rooms, one for the library of the Geological Survey and Department of Geology and the other for the chemical laboratory of the survey.

The entire second floor, 110x50 feet, and the gallery, 13 feet wide, forming the third floor, and supported by Corinthian columns extending from main floor to ceiling, are devoted to the storage and exhibition of the geological and natural-



THE PARK ELECTRIC ELEVATOR.

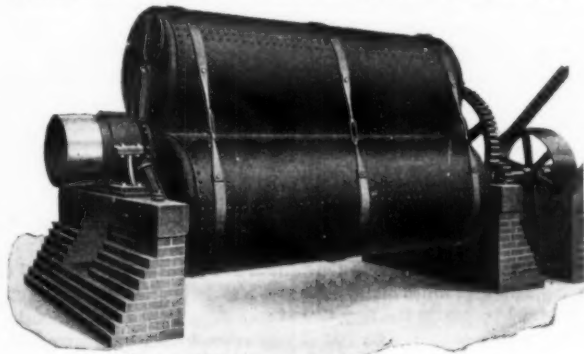
development, which is likely to become standard. It embodies all the latest improvements along alternating-current lines, in addition to the greatest care being taken in its mechanical installation. Many of the industrial plants in the South are installing this class of elevator for quick service in connection with the general use of power furnished by the hydro-electric companies. For the same reason it is being used for passenger service in our cities in place of the direct-current machine. We are thoroughly prepared to meet such needs either for passenger or freight service. As the greater includes the less, we are prepared to furnish anything else in the elevator line anyone may want." Architects, engineers, building owners and others interested in elevators are invited to request the Park Manufacturing Co. for a detailed description of its improved electric elevator.

Alsing Multiple Tube Mill.

The Alsing multiple tube mill is built by the J. R. Alsing Engineering Co. of 136 Liberty street, New York. Describing the machine, the company says:

"Since the introduction of various methods, especially the cyanide process, for separating precious metals from the gangue, it was found necessary to reduce ores to a finer mesh than was with the old amalgamating pans, etc. The question naturally arose, which is the best machine to pulverize the ore to the desired fineness. Considering that the majority selected the tube mill, one would judge that the tube mill, or, as it was called originally, the pebble mill, was the best means to pulverize ores suitable to be treated by the cyanide process. Almost all the Portland cement manufactured in this country is pulverized in tube mills. In the pottery and chemical industry tube mills have been in use over a generation. As there is nothing perfect, the tube mill had its weak-

points, but whatever they may be the principle of grinding may be termed almost perfect. The most important of the weak points was the amount of power necessary to start the mill and the amount of power necessary to operate it. Before the continuous feed and discharge arrangement was introduced with the pebble mill it was tried in the old-style pebble mills to reduce the amount of power by increasing the charge of the mill. The proper charge of a pebble mill is to fill the mill to its largest diameter, which is to the center of the axis; any increase in the charge would be above the center of the axis and would serve as a balancing weight to the same amount below the axis, and by this process the mill would require less power to start and operate the same; but whether it was profitable proved to be a question that was



ALSING MULTIPLE TUBE MILL—FIG. 1.

solved only after long and careful experiments, because by increasing the charge and reducing the power the capacity of the mill was reduced. The pulverizing process in the pebble mill takes place only on the top surface; therefore, the mill should be charged to the point of its largest diameter; by increasing the charge you decrease the surface where the pulverizing takes place, and that will reduce the capacity. Some people claim that the increased weight of the pebbles would have a beneficial effect on the pulverizing of the materials, but a careful study of the question will prove that it is not so. The pebbles are always heavier than the material they have to pulverize, and therefore by gravitation will sink into the finer material to be pulverized until it touches the other pebbles or the inner periphery of the tube mill, the finer material will lodge and fill



NEW SYSTEM BALANCED.—FIG. 2.

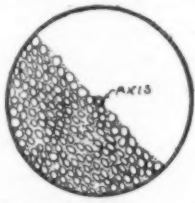
the interstices between the pebbles, and this process of finding a resting place for the pebble takes place only on the top surface. There is no movement of the pebbles below the surface; this can easily be determined by taking a sheet-iron pipe and closing the ends with a glass lid. Where increasing a charge in a pebble mill was of some use in the old-style mill, in a tube mill it is of no use, because the material is fed into these tube mills through the hollow axis, and as it is discharged in the same manner below the center, any increase in the charge of pebbles above the center does not come in contact with the material, and cannot be caused to go upward from its feeding point, but will drain off at the discharge end as fast as it is fed in, and the pebbles will knock against each other, causing the lining to wear rapidly.

"An erroneous claim is that the shape of

the tube mill would influence the coarser to sink to the bottom and the finer material to rise. As a matter of fact, under the prevailing conditions it is a natural consequence that the heavier particles should sink through the finer. This should prove that there is no benefit in increasing the charge of pebbles. The question then was, How can we save power in operating the pebble mill without reducing the capacity? We know that the dimension of the area of the top surface of the pebbles designate the capacity of the mill; it is also well known that if a pebble rolls down on a surface in a cylinder of only one inch in diameter it cannot grind as much or add to the benefit of the pulverizing in any way than if the mill is larger in diameter. The entire load of the general style of tube mill is below the center,

around which the mill must revolve. A device by which this load is distributed around the center is therefore a great improvement and a great saver in power.

"The multiple mill has a tremendous advantage over the old style. Note the three accompanying illustrations. Fig. 3 shows a cross-sectional view of the general style of tube mill (the unbalanced system). Fig. 2 is a cross-sectional view of the multiple tube mill (the balanced system). A comparison of the two views will easily convince anyone of the tremendous saving in power by the balanced system over the unbalanced system of tube mills. We claim a saving in power of at least 50 per cent. Edgar A. Volkerson, a prominent mechanical engineer in Hamburg, who has made a careful study of the two systems, claims that there is a saving of 45 per cent. in power by the balanced system over the unbalanced, or we may claim that with the same power the multiple tube



OLD SYSTEM UNBALANCED.—FIG. 3.

mill will have double the capacity of the ordinary style of tube mill. Besides the great saving in power, the multiple tube mill shows other advantages; it is less in first cost, much easier in handling for transportation and erecting, and, of course, less in freight charges."

Sieglwart Reinforced Concrete Beam.

The American Sieglwart Beam Co. of Newark, N. J., in control of United States patent rights, has a display at the Builders' Exchange, Baltimore, which has been viewed by many architects, engineers and contractors.

The display consists of two hollow floor beams, each 15 feet in length, reinforced with six quarter-inch steel rods. The beams are supported at each end on hydraulic stone steps, being loaded with hydraulic stone sills to a total official weight

aggregating 8236½ pounds. The carrying capacity of the beams as made is 60 pounds to the square foot. In the two beams there are 22.4 square feet, thus being loaded to over six times the carrying capacity, about 370 pounds to the square foot, while the building requirements for safety are only 240 pounds to the square foot. It is only fair to refer to the fact that one of the beams was broken by careless handling, being dropped from the top of the wagon wheel and striking in the center of beam on the curb. Nevertheless, the beams carry the weight, 8236½ pounds, with only a reasonable deflection.

The Sieglwart beam system is the invention of a Luzerne architect, Hans Sieglwart, and his company there has established within the past six years throughout Europe 51 successful plants, whose annual production ranges from 40,000 to 350,000 square yards of beams. We are advised that the system is covered by patents throughout the world.

Sieglwart beams are made in spans ranging from 9 to 21 feet, having uniform width of 10 inches at the bottom and 9½ inches across the top, thus leaving half inch for grouting. When put together a perfect monolithic floor or roof is the result, their sides corrugated so that the cement used in joining them can enter the spaces and form a solid mass.

The process of manufacture is very sim-

in manufacture is as 1 to 4. The beams, being made hollow, have the same strength as though they were solid, with a great reduction in weight. On account of being hollow, they are more easily heated; also act as a conduit for pipes, electric wires, etc., lessening the danger from fire.

The manner of laying the beams is exactly the same as with wooden beams. They are made in different lengths, and, besides being used on floors, they can be employed in the construction of roofs, terraces and staircase supports; also in walls where there is a side pressure, as in warehouses, coal bunkers, etc. It has been demonstrated that these beams can support a load four or five times as great as can the ordinary wooden beams. The strength of the beam can be increased to whatever loading test may be required with the same units of stress as in reinforced concrete construction.

The Baltimore Sieglwart Beam Co., offices in Builders' Exchange, 15 East Fayette street, Baltimore, has acquired the rights for Maryland and District of Columbia. It is being organized by Daniel A. Leonard of Baltimore, Victor G. Bloede of Catonsville and S. A. Boothe, president of the American Sieglwart Beam Co. The capital stock will be \$150,000, with a first mortgage bond issue of \$150,000.

The National Hydraulic Stone Co. and the Caton Heights Land Co. will be ab-



SIEGLWART REINFORCED CONCRETE BEAM.

ple at Sieglwart factories. The beams are made in layers eight feet in breadth.

The advantages of this flooring are said to be great supporting power, safety from fire and greater ease and speed in building secured by its use. The beams insure freedom from excess of heat and cold, on account of their hollow form; the requisite thickness of floors is reduced; they can be used as a heating floor by sending warm air through them.

By this method the work of the builder is greatly facilitated, as a number of floors can be laid in a short time by ordinary laborers and several floors can be used at once, thus doing away with scaffolding.

Another advantage claimed for the Sieglwart system is that beams made in a factory are protected against unfavorable weather conditions during the time the mortar is setting, and it is thus comparatively easy to secure uniformity. The size of the iron rods used in the beams is between one-quarter and seven-sixteenths inch, and usually six such rods are used in each beam. Two of these rods are laid parallel with the under face of the beam and the other four are bent upward in truss form and knotted at the ends in order to strengthen their supporting power. The proportion of cement to coarse sand used

sorbed, and Sieglwart beams and hydraulic stone will be manufactured at the same plant. The Caton Heights property will be developed.

The National Hydraulic Stone Co. is the owner of the Fisher patents for Maryland (except Washington county) and District of Columbia. Its product has been used in the erection of many buildings in Baltimore city and county. Its plant is one of nearly 100 plants in operation throughout this country and Europe. It is claimed that the product is not only absolutely fire-proof, but also waterproof.

It is proposed by the Baltimore Sieglwart Beam Co. to develop its territories by the establishment of subsidiary plants at 10 points to supply the demand which has already been created, when the parent company is under way.

A plant will also be established at Washington, D. C., for the manufacture of both products, subsidiary to the Baltimore Sieglwart Beam Co.

Kahn System Pocket Scale.

The Kahn system pocket scale is illustrated herewith. It is convenient for engineers and architects, who are using it freely in their work. A typical example of its use is as follows:

Size of floor, 16x70 feet; beams are 16-foot span and spaced 7 feet apart; safe live load, 150 pounds per square foot.

To Design the Slab.—Assume the dead weight of slab as 50 pounds per square foot and set the 7 of the inner circle opposite 200 of the outer circle. The design of the slab is given in slot above, viz., concrete slab four inches thick reinforced with either $\frac{1}{2}$ x $1\frac{1}{2}$ inch Kahn trussed bars 16 inches on center, or rib metal four-inch mesh. The slab being four inches thick, checks with the assumed dead weight of 50 pounds.

To Design the Beam.—Use table on back of scale. Beam must carry the combined

500 gallons, 750 gallons, 1000 gallons and 1500 gallons.

"Centrifugal pumps are those in which water is given a high velocity by revolving blades or 'impellers.' The blades of the impellers are enclosed on the side by shrouding extending from the inlet circumference to the periphery, where the water is discharged into 'different vanes.' The diffusion vanes are provided for receiving the water leaving the impellers at very high velocity to gradually bring it back to a lower velocity and prevent losses by shock, when the velocity appears as pressure. The transformation at this point from kinetic energy into potential energy, i. e.,

pump or a $1\frac{1}{2}$ -inch gate valve for connecting the pump with other source of supply to fill pump casing and suction pipe with water, so that the pump may be started. A centrifugal pump will not start to handle water unless pump casing and suction pipe are entirely filled with water, so that when rotation starts the centrifugal action at once acts on the water between the blades of the impellers, and, in turn, draws through more water from the suction pipe, and the operation of the pump is then continuous. Manufacturers must also furnish the necessary oil and grease cups and the capacity plate, giving a statement of the capacity of the pump against 100 pounds pressure, the equivalent number of one-and-one-eighth-inch smooth nozzle fire streams, the diameter of the impellers and the revolution per minute for full speed and a caution, 'never fail to have ample power to drive the pump at full capacity.' The capacity plate is made of an aluminum alloy to avoid corrosion.

"The discharge from a centrifugal pump is continuous, while that from a reciprocating steam pump or a horizontal or vertical triplex power pump, which is often used for fire service, is pulsating, causing water hammer and consequent danger to piping and hose. The centrifugal pump also has no valves corresponding to those in a reciprocating pump, which always give more or less trouble, due to the fact that steam underwriters usually remain full of water at all times, and corrosion between the bronze valve seats and cast-iron valve decks occur through electrolytic or other unknown corrosive action, and in the course of a few years must be replaced by tapping out the valve decks larger and putting in a new set of valve seats.

"You will note that the underwriters will not accept a belt-driven centrifugal pump for fire service, but all units must be direct connected to the power driving the same. The following table will, therefore, be of interest as covering the range of 'standard' speeds, with a normal diameter of impeller or runner. The pressure in every case is assumed 100 pounds at the outlet, plus about 14 feet for friction, giving a maximum total head of 245 feet. In no case

"In addition to the above table, it will be stated that wide variation in the speeds of a centrifugal pump can be made by small changes in the diameter of the impeller and the blade angle, and that the above table does, therefore, not give a complete statement of all possibilities regarding speed limits. Maximum and minimum speeds obtained by changing impeller diameter and blade angle are governed by the manufacturers' type of design and standard casing patterns, and therefore will not be discussed here. However, it is noted herewith below the ranges of speeds which are recommended by the underwriters as maximum and minimum:

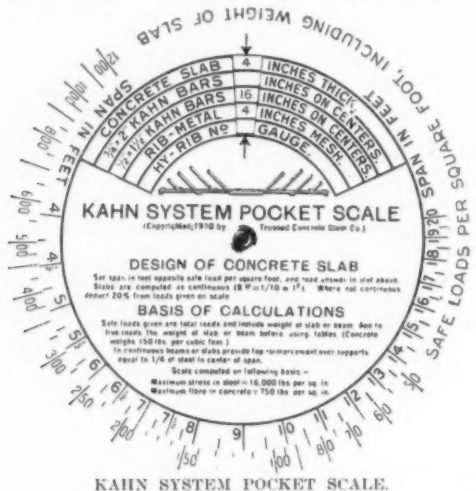
Size pump, gals. per minute.	Permissible speeds, R. P. M. per underwriter specifications.
500.....	800-1500
750.....	700-1400
1000.....	700-1400
1500.....	600-1200

"In comparison of operating cost of a steam-driven fire protection and the electric driven, which causes no expense when not running, will say that it has been found to cost \$1500 to \$2400 a year to maintain steam in a 10,000-spindle yarn mill for the purpose of having it available to operate a 750-gallon steam underwriter pump. It will be seen that the electric-driven centrifugal pump will pay for itself in a year or two. This record of expense of maintaining steam was furnished by two different mills in the South, and may, therefore, be taken as correct." Herewith is an illustration of a Buffalo centrifugal fire pump.

To Improve 2,000,000 Acres.

Mr. Jeff B. Snyder of Tallulah, La., states that a plan will be presented to the Louisiana Legislature in May for the creation of a drainage district comprising Concordia, Tensas, East Carroll and Madison parishes, looking to the improvement and reclamation of 2,000,000 acres of fertile land indicated by the fact that there are farms in that region which have been under cultivation for more than 100 years without the use of commercial fertilizer.

At a meeting this week of the State Board of Education of North Carolina it



dead weight and live load of slab, or 200 pounds per square foot, for panel width of seven feet. Total weight of beam equals $200 \times 7 \times 16 = 22,400$ pounds. As shown in heading of table, the total depth of beam is 1-12 of the span, or 16 inches. As the beams are freely supported and not continuous, use the fourth column of table. Note that beam reinforced with two $1\frac{1}{2}$ x $2\frac{1}{4}$ inch Kahn trussed bars carries 22,560 pounds, and width of beam is 10 inches. Width of T is more than three times the width of the beam as required by note.

The complete design of floor is therefore as follows: The slab is four inches thick and reinforced with either $\frac{1}{2}$ x $1\frac{1}{2}$ inch Kahn trussed bars spaced 16 inches centers, or No. 4 rib metal. Beams are 16 inches deep, 10 inches wide, and reinforced with two $1\frac{1}{2}$ x $2\frac{1}{4}$ inch Kahn trussed bars.

The Trussed Concrete Steel Co. of Detroit, Mich., issues this pocket scale.

Buffalo Centrifugal Fire Pumps.

The Buffalo Steam Pump Co., Buffalo, N. Y., says: "The term 'Underwriter' pump means that the pump is built in accordance with specifications (the national standard) prepared by the Associated Factory Mutual Fire Insurance Companies and adopted by the National Board of Fire Underwriters and the National Fire Protection Association.

"When a pump manufacturer desires to have his name entered upon a list of makers of approved pumps there is sent to the inspection department of the Associated Companies a set of working blueprint drawings for each size of pump which is desired accepted. These drawings are then examined and approved, or such suggestions made to the pump manufacturer as may appear desirable to the engineering department of the insurance interests.

"Lower insurance rates can be obtained if the risk is properly protected by approved fire-fighting appliance, including a steam or centrifugal fire pump.

"The usual pressure at which fire pumps are required to deliver their water is 100 pounds per square inch, and, according to the Underwriters' rating, the pumps are made in four different sizes, having the following capacities in gallons per minute:

from velocity head to static pressure. The vanes are really a series of nozzles, the water being received at the small end and passing from the larger end to the pressure chamber, and then to the next 'stage' through a 'return chamber.' One impeller and one diffusion ring constitute a stage. The larger the number of stages the slower can be the speed of the pump. The centrifugal fire pumps as ordinarily built are 'two stage,' as it is found that the ordinary commercial range of motor-speed requirements can be met with two stages with a margin and with the maximum efficiency.

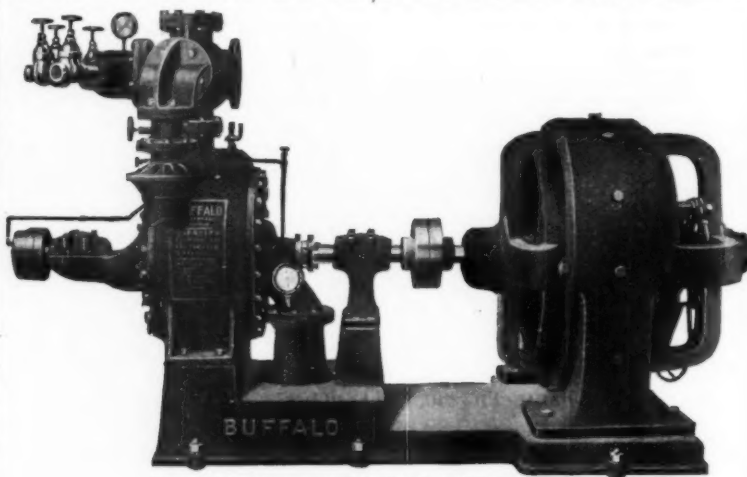
"The shells or castings of two-stage pumps are, according to the underwriter specifications, constructed to withstand 240 pounds test pressure, and, like the side plates, are made of close-grained cast iron. All impellers, diffusion vanes, glands, clearance rings, interior nuts and linings of stuffing-box throats and glands are made of high-grade castings. The bearings are single ring oiling, very large, and fitted with removable bearing metal shells with cylindrical fit. The bearings must also be entirely outside the glands to avoid any trouble from oil being floated off by water leakage.

"Shafts are of the best forged open-heart steel, covered with bronze sleeves where the pump is in contact with the water.

"A hose connection casting is provided to fit on the discharge opening of the pump casing.

"The hose valves are attached to a flange on the hose connection casting, which is so arranged that valves may be placed on either side of the pump. No air chamber is required on a centrifugal pump. The discharge from the pump to supply water tower or sprinkler system is also taken from the hose connection casting.

"Fittings which are required to be furnished with these pumps, according to the underwriter specifications dated November 1, 1907, include a double spring pressure gauge, vacuum gauge, starting valve (by which the capacity of the pump may be governed somewhat, but mainly to allow the escape of air which may collect in the hose connection casting), and also either a suitable steam ejector for priming the



THE BUFFALO CENTRIFUGAL FIRE PUMP.

should the suction lift for a centrifugal fire pump be over 10 to 14 feet, the suction piping very large and provided with a large foot valve well submerged under the surface of the water supply:

was stated that the drainage of the Mattamuckee Lake district in Hyde county is to be pushed to the speediest possible completion, the survey being now well under way.

Buffalo Steam Pump Co. Centrifugal Underwriter Pumps.				
Size pump.....	500 gal.	750 gal.	1000 gal.	1500 gal.
Two-stage pumps:				
Number hose valves.....	2	3	4	6
Size of suction and discharge openings.....	6"	8"	8"	10"
Total head.....	245'	245'	245'	245'
Discharge pressure.....	100 lbs.	100 lbs.	100 lbs.	100 lbs.
Size motor advised.....	55 H. P.	80 H. P.	100 H. P.	140 H. P.
Standard R. P. M.....	1120-1150	1120-1150	1120-1150	1120-1150
Can be designed for any standard motor speed between limits.....	1120-1440	1120-1440	1120-1440	800-1150
Three-stage pumps:				
Total head.....	360'	360'	360'	360'
Discharge pressure.....	150 lbs.	150 lbs.	150 lbs.	150 lbs.
Size motor advised.....	85 H. P.	120 H. P.	150 H. P.	210 H. P.
Standard R. P. M.....	1120-1150	1120-1150	1120-1150	1120-1150
Speed limits (see above).....	1120-1440	1120-1440	1120-1440	800-1150
It will be noted that there is an allowance of 10 to 12 feet suction lift (difference between "total head" and discharge pressure).				
Memo: 231 feet equivalent to 100 pounds.				

Construction Department

TO OUR READERS!

In order to understand and follow up properly the Construction Department items, please bear in mind the following statements:

EXPLANATORY

The MANUFACTURERS' RECORD seeks to verify every item reported in its Construction Department by a full investigation and complete correspondence with everyone interested. But it is often impossible to do this before the item must be printed, or else lose its value as news. In such cases the statements are always made as "rumored" or "reported," and not as positive items of news. If our readers will note these points they will see the necessity of the discrimination, and they will avoid accepting as a certainty matters that we explicitly state are "reports" or "rumors" only. We are always glad to have our attention called to any errors that may occur.

In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the MANUFACTURERS' RECORD.

ADDRESS FULLY

To insure prompt delivery of communications about items reported in these columns, the name of one or more incorporators of a newly incorporated enterprise should be shown on the letter addressed to that town, or to the town of the individual sought, as may be shown in the item, as sometimes a communication merely addressed in the corporate or official name of a newly established company or enterprise cannot be delivered by the postmaster. This will help to insure prompt delivery of your communication, although it is inevitable that some failures on the part of the postal authorities to deliver mail to new concerns will occur.

WRITE DIRECTLY

It is suggested to advertisers and readers that in communicating with individuals and firms reported in these columns, a letter written specifically about the matter reported is likely to receive quicker and surer attention than a mere circular.

The Daily Bulletin of the Manufacturers' Record is published every business day in the year for the purpose of giving the earliest possible news in regard to new industrial, railroad and financial enterprises organized in the South. It is invaluable to contractors, manufacturers, engineers and all others who want to get in touch at the earliest moment with new undertakings or the enlargement of established enterprises. The subscription price is \$25 a year. All advertising contracts in the Manufacturers' Record extending over a period of three months include a subscription for the length of time of the contract to the Daily Bulletin.

BRIDGES, CULVERTS, VIADUCTS

Ala., Birmingham.—Jefferson county will construct 80-foot steel span with 120 feet of approach over Village Creek near Porter, Ala.; 70-foot span over Shade's Creek; 50-foot span over Black Creek; 80-foot span over Shoal Creek, and 40-foot span over Cunningham Creek; bids to be opened March 18; J. W. Gwin, County Engineer, 103 Courthouse. (See "Machinery Wanted.")

Ark., Fort Smith.—Free Bridge Commission instructed its engineer to complete specifications for proposed bridge. Address Waddell & Harrington, engineers, New Wilson Bldg., Kansas City, Mo.

Ga., Atlanta.—Southern Railway, W. H. Wells, chief engineer of construction, Washington, D. C., will expend \$50,000 in strengthening bridges between Macon and Atlanta.

La., Gretna.—Jefferson parish will construct steel bridge across Harvey canal; bids to be opened June 1; E. M. Hubert, secretary Police Jury. (See "Machinery, etc., Wanted.")

La., Houma.—City awarded contract to William Watkins of Houma to construct bridge across Prairie drainage canal.

Mo., Sibley.—Atchison, Topeka & Santa Fe Railway, C. A. Morse, chief engineer, Topeka, Kans., has been authorized to construct bridge across Missouri River.

N. C., Winston-Salem.—Forsyth County Road Supervisors passed resolution authorizing construction of steel bridge about 50 feet long across Brushy Fork Creek; abutments to be raised; work to be done by convict labor or by contract; contemplate construction of 50-foot steel bridge across Reynolds Creek; L. B. Brickenstein, R. Kinnamon and W. L. Pfaff will receive bids.

Okla., Geary.—Cherryvale, Oklahoma & Texas Railway Co., S. W. Porter, president, Caney, Kans., will construct 200-foot span.

Okla., Shawnee.—Shawnee Electric Railway, A. Hardgrave, chief engineer, will construct two steel bridges over Canadian River in connection with construction of electric railway, for which Shawnee Railway Construction Co. is general contractor.

Okla., Tulsa.—City voted issuance of \$30,000 of bonds for constructing, extending and maintaining viaducts and bridges, etc.; John O. Mitchell, Mayor. (Recently mentioned.)

S. C., Newberry.—Newberry county will construct steel or iron bridge across Saluda River. Dr. O. B. Mayer, I. H. Hunt and Dr. George Y. Hunter comprise special commission.

Tex., Aransas Pass.—Aransas Pass Terminal Railroad Co. will build one-mile pile trestle and 40-foot drawbridge. Address E. O. Burton, San Antonio, Tex. (See "Machinery Wanted.")

Tex., Belton.—Bell County Commissioners awarded contract to Missouri Valley Bridge & Iron Co., Dallas, Tex., for construction of nine iron bridges across streams in Temple and Holland districts; cost \$600.

Tex., Dallas.—Municipal Commissioners adopted plans of J. M. Preston, City Engineer, for steel reinforced-concrete bridge to be constructed across Turtle Creek on Cedar Springs Ave.; 60-foot span; cost \$7000.

Tex., Houston.—North Side Improvement Club accepted plans for bridge across Houston ship channel at foot of Main St.; 1600 feet long; driveway 43 feet wide and space for two street-car tracks and two sidewalks 6 feet wide; estimated cost, \$225,000.

Tex., Laredo.—National Railways of Mexico, E. N. Brown, president, 25 Broad St., New York, awarded contract to Bancara y Obras de Bienes Rices, Mexico City, Mexico, to construct bridge over Rio Grande River; reinforced concrete and steel; six 175-foot deck spans. (Recently mentioned.)

Va., Lynchburg.—H. L. Shaner, City Engineer, will prepare plans and specifications for reinforced concrete bridge across James River, connecting city with Amherst county.

Va., Bristol.—City awarded contract at about \$1200 to Virginia Bridge & Iron Co., Roanoke, Va., to construct bridge across Beaver Creek on Front St., and to C. R. Scharf of Bristol for reinforced concrete abutment work at \$6.70 per cubic yard.

Va., Wise.—Wise County Supervisors will construct six steel or iron bridges—two in Gladeville district, two in Lipps and one each in Richmond and Robertson districts; city of Wise will construct steel bridge connecting road from Norton with main part of town.

CANNING AND PACKING PLANTS

Ark., Little Rock.—Fred. Hopenschutz, president Pulaski County Truck Growers' Association, is interested in organization of company with \$10,000 capital stock to establish cannery.

Ark., Mena.—Canning, Shipping & Manufacturing Co. purchased machinery for cannery and broom factory; cannery to have capacity of 10,000 cans daily; operations of broom factory to commence at close of canning season.

Mo., Neosho.—Neosho Canning Co., recently reported incorporated with \$3000 capital stock, is reorganization of Neosho Packing & Manufacturing Co.; will continue operation of plant; H. S. Fly, president; M. T. Rice, vice-president; F. A. Talcott, secretary-manager; W. M. Guthrie, treasurer.

Okla., Shawnee.—Big Four Packing Co., recently reported incorporated with \$1,000,000 capital stock by M. B. Wells and others, will erect four-story building with basement; 354x200 feet; fireproof construction; electric lighting; cost \$300,000; bids opened. (Incorrectly noted at Sapulpa.)

Tex., Dallas.—Ogburn Canning Co. incorporated with \$30,000 capital stock by J. W. Ogburn, J. S. Ogburn and G. M. Best.

Va., Altavista.—Valley Canning Co. or-

ganized with C. Q. Edwards president; P. C. Landiff, vice-president; P. H. McGill, secretary; will erect building and can tomatoes.

Va., Chambersburg.—Ed Carner will, it is reported, establish cannery.

CLAYWORKING PLANTS

Ark., Helena.—Bricks.—Helena Brick Co. incorporated with \$15,000 capital stock by A. P. Coolidge, C. R. Coolidge, W. A. Coolidge and others.

N. C., Burlington.—Brick, Terra-cotta, etc. Midway Improvement Co. incorporated with \$50,000 capital stock by H. L. Fowler, G. D. Tysor and J. W. Murray.

N. C., Emma (P. O., Asheville)—Bricks.—George C. Shehan, proprietor of Kenilworth Brick Works, purchased Penniman brick yard; will equip and operate in connection with Kenilworth plant; will operate as West Asheville Brick Works.

Okla., Dewey.—Terra-cotta.—Joseph A. Bartles, president of Commercial Club, is interested in establishment of terra-cotta plant.

Okla., Oklahoma City.—Brick.—Oklahoma Granite Brick Co., Wm. Zull, president, has purchased machinery for sand-lime brick plant; daily capacity, 20,000 to 40,000; will erect structural steel and brick buildings and frame sheds; construction by owner; no further material needed; R. L. Corley, secretary and manager. (Recently noted as Oklahoma City Silica Brick Co.)

Okla., Kiowa.—Brick and Tile.—Leroy Brick & Tile Co. incorporated with \$50,000 capital stock by S. C. Wagner and J. E. Wagner, both of Kiowa; D. A. Bennett and F. W. Bennett of Oklahoma City.

Okla., Sulphur.—Brick.—Hackney Pressed Brick Co. incorporated with \$30,000 capital stock by Charles H. Murray, Charles W. Robinson and Albert H. Thurdie.

Okla., Tulsa.—Brick.—Tulsa Paving & Building Brick Co. incorporated with \$100,000 capital stock by G. W. Ross, J. A. Galloway, W. H. Crowl and W. H. Maltin.

Tex., Ferris.—Brick.—Diamond Press Brick Co. incorporated with \$30,000 capital stock by J. M. Batcheler, J. H. Wilson and R. B. Cunningham.

W. Va., North Mountain.—Clay Products.—Adamantine Clay Products Co., recently reported to be incorporated with \$150,000 capital stock, awarded contract at \$56,855 to International Construction Co., Cleveland, O., for erection of brick plant; contract price to include site, equipment, railroad siding, water reservoir, etc., ready for operation.

COAL MINES AND COKE OVENS

Ala., Birmingham.—Jefferson Coal Co. incorporated with \$10,000 capital stock; W. A. Massey, president; B. H. Stowers, vice-president and treasurer, and M. E. Stowers, secretary.

Ala., Marvel.—Roden Coal Co., Birmingham, Ala., is expending about \$40,000 at its Marvel mines; \$12,000 is to be used in building concrete work for steel washer, to be installed, and \$30,000 for machinery.

Ark., Fort Smith.—Gunther Coal Co. incorporated with \$75,000 capital stock by A. P. Gunther, A. N. Sicard, C. E. Warner and others.

Ky., Harlan County.—Wisconsin Steel Co., subsidiary to International Harvester Co., Michigan Ave. and Harrison St., Chicago, Ill., is planning development of portion of 20,000 acres of coal land in Harlan county; will equip mines with electrical machinery, etc., for daily output of 2000 tons coal and construct 300 coke ovens with daily capacity of 600 tons coke; expenditure estimated at \$500,000; will install sawmills to manufacture lumber for construction purposes; will need boilers, engines, electrical machinery, sawmills, woodworking equipment, etc.; address all correspondence to W. C. Tucker, superintendent in charge, Hotel Touraine, Big Stone Gap, Va. (See "Machinery Wanted.")

Ky., Paintsville.—New York capitalists are negotiating with John C. C. Mayo for extensive tract of coal land.

Md., Westernport.—Franklin Coal Co. will develop coal mines.

Miss., Jackson.—Morrison Coal Co., recently reported incorporated, has \$30,000 capital stock, not \$10,000 as reported lately.

Mo., Rich Hill.—Atlas Coal Mining & Mercantile Co. contemplates increasing capital stock from \$30,000 to \$35,000.

Mo., St. Louis.—Anthracite Colette Fuel Co. incorporated with \$75,000 capital stock by James J. Butler, P. G. Linchey, James M. Smith and others.

Okla., Oklahoma City.—Levisa Creek Coal, Coke & Power Co. organized with \$2,000,000 capital stock; A. J. Powell, president, Fort Worth, Tex.; G. G. Kerr, vice-president, of Oklahoma City; F. M. Fry, second vice-president, Chickasha, Okla.; T. J. Wood, secretary, Oklahoma Bldg., Oklahoma City; C. T. Berryman, assistant secretary, of Oklahoma City; expects to expend \$250,000 this year.

Okla., Tulsa.—Oklahoma Fuel Supply Co. incorporated with \$100,000 capital stock by J. H. Evans, A. W. Leonard and others.

Tenn., Jellico.—Campbell Coal Mining Co., R. O. Campbell, president, Atlanta, Ga., issued bonds for \$300,000; continuing operation of Coalmont, Jackson, Piedmont and Egan mines in Jellico district of Tennessee and Kentucky; also owns 15,000 acres coal land in Clay, Knox and Leslie counties, Kentucky, for future development.

Va., Bearwallow.—Cinchfield Coal Corporation, Dante, Va., is reported as to develop five new coal mines at Bearwallow to give daily production of 9000 tons, an increase of about 3000 tons over present output.

West Virginia.—United Thacker Coal Co., 120 Broadway (postoffice address, Box 1907), New York, is considering plans for development of 53,000 acres coal lands in Mingo and Logan counties.

W. Va., Bluefield.—Island Creek Coal & Coke Co. is developing four additional coal mines.

W. Va., Charleston.—A. D. Harrah contemplates development of 4743 acres of coal and timber land when railroad facilities become available. (Recently noted.)

W. Va., Leckie.—West Virginia Pocahontas Coal Co., Bluefield, W. Va., will develop coal mines at Leckie.

CONCRETE AND CEMENT PLANTS

Okla., Muskogee.—Ham's Method Concrete Co. incorporated with \$10,000 capital stock by Franklin Miller, D. H. Middleton, W. D. Eaton and others.

Tex., Calvert.—J. H. Duke and F. Martin will establish plant for manufacturing concrete blocks, sewer pipe, etc.

Va., Highland Park, P. O. Richmond.—Richmond Concrete Stone Co., A. H. Robins, president, recently reported incorporated with \$10,000 capital stock, will establish plant to manufacture concrete blocks, bricks and other building material; will erect 25x40-foot building; no machinery needed.

Va., Highland Park, P. O. Richmond.—Richmond Concrete Stone Co. incorporated with \$10,000 capital stock; A. H. Robins, president; J. M. Fourqurean, vice-president; W. H. Dunn, secretary-treasurer.

COTTON COMPRESSES AND GINS

Ala., Gadsden.—Queen City Gin Co. (recently noted to erect cotton gin) will conduct gins, ginners and feed business; cost of building to be erected, \$12,000; construction by owner; will install 4-80-saw gin outfit, 75-horse-power motor and air compressor. (See "Machinery Wanted.")

Ga., Vesta.—Cunningham, Stevens & Co. incorporated with \$10,000 capital stock by J. C. G. Stevens, Thomas S. Cunningham, W. O. Pass and others; will establish cotton gin, gins, ginners, sawmill, etc.

Miss., Como.—Como Cotton Compress Co. incorporated with \$40,000 capital stock by T. H. Taylor, E. P. Coleman and others.

Okla., Hobart.—Traders' Compress Co., main office, Fort Worth, Tex., will rebuild compress recently reported burned; loss \$300,000.

Okla., Hallett.—Farmers & Merchants' Ginning Co. incorporated with \$10,000 capital stock by A. Conner, H. L. Watts, C. S. Bell and others.

S. C., Aiken.—Aiken Oil Mill (operated by Southern Cotton Oil Co., main office, 24 Broad St., New York) will enlarge cotton gin; will erect building 30x100 feet and double capacity; awarded contract to Continental Gin Co., Atlanta, Ga., for three 80-saw gins; will also install two presses, necessary suction pipes and 100-horse-power boiler to furnish power for new plant.

Tex., Elgin.—Farmers' Gin Co. incorporated with \$10,000 capital stock by C. F. Berg, J. H. Johnson, H. H. Luedicke and others.

Tex., Grapeland.—M. S. and A. B. Spence will erect four-stand cotton gin; corrugated iron; fireproof.

Tex., Wichita Falls.—W. J. Haynes awarded contract for gin plant to cost \$25,000.

COTTONSEED-OIL MILLS

Ga., Atlanta.—Marion Harper Cotton Oil Co. incorporated with \$90,000 capital stock by M. S. Harper, Edgar Dunlap, W. E. Hawkins and others.

Ga., Hawkinsville.—Thompson Oil Mill Co. incorporated with \$60,000 capital stock by A. J. Thompson, Morgan Thompson, Albert Peacock and others.

Ga., Unadilla.—King Lumber & Oil Co., J. A. King, president, increased capital stock from \$25,000 to \$65,000; will build cottonseed-oil mill and install machinery. (See "Machinery Wanted.")

Tenn., Memphis.—Memphis Cottonseed Products Co. incorporated with \$10,000 capital stock by J. C. Neptune, R. E. Malden, Alfred H. McAdoo and others.

DRAINAGE AND IRRIGATION SYSTEMS

Md., Annapolis.—A Theodore Brady of Annapolis has asked Legislature to incorporate Maryland Irrigation Co. with \$100,000 capital stock.

N. C., Edenton.—Bear Swamp Drainage District postponed date of opening bids from March 8, as lately stated, to March 26, for excavating canals, including one main canal and five branches, amounting to about 145,000 cubic yards; Patrick Matthews of Edenton is engineer in charge of construction. (See "Machinery Wanted.")

Okla., Oklahoma City.—Wiggins Hydraulic Sub-Irrigation Co. incorporated with \$100,000 capital stock by Henry M. Scales, Abner Davis, Milton Brinan and others.

Tex., La Pryor.—Zavalla Land & Water Co., O. P. Taylor, Kansas City, Mo., vice-president, will install irrigation system on Neuses River; three available sources of water supply for irrigation, artesian wells, shallow wells to sheet water and pumping water from Neuses River.

Tex., Lobo.—Lobo Land & Irrigation Co., P. O. Box 123, Crockett, Tex. (recently reported incorporated with \$50,000 capital stock under Crockett), has purchased town of Lobo; also several thousand acres surrounding townsite and will develop; contemplates construction of irrigation system; F. A. Smith, president; J. H. Smith, vice-president; J. W. Young, secretary; Archer Baker, treasurer. (See "Land Developments.")

Tex., Millett.—New Era Land & Irrigation Co. organized to irrigate Lane ranch, in La Salle county, purchased from Mrs. M. N. Lane and H. Clifton Lane for \$125,000; property is to be irrigated by air-lift system, and will then be divided into small farms; 800 acres under cultivation.

Tex., Port Lavaca.—Drainage District No. 1 of Calhoun county defeated issuance of \$22,000 of bonds for drainage of 12,000 acres. Address County Commissioners. (Recently mentioned.)

Tex., San Antonio.—W. C. Moore, William C. Lott Company, Groesbeck & Moore, H. G. Dearing and W. C. Edwards, all of St. Paul, Minn., purchased 400 acres of land for \$31,000; will irrigate and subdivide into small tracts.

ELECTRIC-LIGHT AND POWER PLANTS

Ala., Guntersville.—J. W. McKinstry and W. J. Wilson, Birmingham, Ala., are considering construction of electric-light and power plant.

Ala., Opelika.—City will receive bids until April 15 for furnishing electric lighting; city to make other arrangements for electric and water supply in case bids are unsatisfactory; L. F. Dickson, Mayor; city recently noted to vote March 28 on \$55,000 for electric light and water supply. (See "Machinery Wanted.")

Ark., Little Rock.—City will open bids March 23 for enlarging and improving electric-light plant; F. M. Oliver, clerk. City Council recently mentioned as having appropriated \$55,000 for electric-light plant. See "Machinery Wanted.")

Ga., Columbus.—Columbus Power Co. will build additional dam across Chattahoochee River; reported structure will be 1000 feet long and 70 to 80 feet high, developing 15,000 horse-power for transmission by electricity; general managers, Stone & Webster Engineering Corporation, Boston, Mass.

Ga., Dalton.—City will vote on issuance of \$30,000 of bonds for improvement and ex-

tension of electric-light system. Address The Mayor. (Recently mentioned.)

Ga., Donaldsonville.—City will vote on bond issue for electric-light plant and water-works; estimated cost \$25,000. Address The Mayor.

Miss., Columbus.—Sam B. Johnson, proprietor Glimmer Hotel, plans to install private electric-light system and to heat building from exhaust steam.

Miss., Columbus.—Manuel Dandadeke, proprietor Columbus Belle Cafe, will install electric-light plant for private use.

Miss., Jackson.—Jackson Railway & Light Co., Thomas McClelland, president, will, it is reported, improve electric-light system.

Mo., Independence.—City contemplates improving electric-light plant. Address The Mayor.

N. C., Elizabeth City.—Dare Lumber Co. contemplates increasing capacity of electrical plant so as to furnish power to other manufacturing plants.

N. C., Farmville.—City will construct electric-light plant. Address The Mayor.

Okla., El Reno.—Canadian Mill & Elevator Co., J. W. Maney, president, awarded contract at about \$30,000 for erection of steam-power plant with 200-kilowatt street-railway generator to be operated by 250-horse-power simple engine now owned by company; power-plant equipment to include Corliss engine of 250 horse-power, two 175-horse-power boilers, surface condenser, cooling tower, etc.

Okla., Oklahoma City.—Levisa Coal, Coke & Power Co. plans construction of water-power-electrical plant to cost \$500,000; T. J. Wood, secretary, Oklahoma Bldg. (See "Coal Mines and Coke Ovens.")

Okla., Oklahoma City.—Oklahoma Electric Power Co. incorporated with \$250,000 capital stock by E. J. Deupree, W. T. Croslen, E. S. Sullivan and others.

Okla., Pittsburg.—Pittsburg Water & Light Co. incorporated to construct electric-light plant and water-works.

Okla., Medford.—City voted issuance of \$18,000 of bonds for construction of electric-light plant. Address The Mayor.

Okla., Tahlequah.—J. B. Moore contemplates construction of dam across Illinois River and development of water-power to operate electric railway.

S. C., Orangeburg.—Edisto Power Co. incorporated with \$10,000 capital stock by Wm. C. Wolfe and Joseph A. Berry of Orangeburg and Lawrence Manning of Camden, S. C.

Tex., Belton.—City granted franchise to W. W. Thornton to construct electric-light and power plant.

Tex., Brownsville.—City voted \$15,000 bond issue to improve electric-light plant. Address The Mayor. (Recently mentioned.)

Tex., Houston.—Houston Electric Co. is considering plans for proposed power station which may be located near Texas City, Tex.; station is to be of brick and concrete; initial equipment will include two steam turbo-generators of 1000 and 500-kilowatt capacity, boilers and condensers, switchboards, etc.; bids for lumber will be opened March 18; Mark Lowd, southwestern manager of Stone & Webster Engineering Corporation, 147 Milk St., Boston, Mass.

Tex., Huntsville.—Huntsville Electric & Power Co. incorporated with \$12,000 capital stock by J. G. Ashford, C. G. Barrett, G. A. Wynne and others.

Tex., Marfa.—Marfa Electric Light & Ice Co. incorporated with \$5000 capital stock by W. H. Cleveland, A. M. Porter, T. C. Mitchell and others.

Tex., Pearsall.—Pearsall Water, Ice & Light Co. incorporated by George F. Hinds and others. (See "Ice and Cold-Storage Plants.")

Tex., Rice.—Westmoreland Supply Co., 1095 Scanlon Bldg., Houston, Tex., contemplates installation of 30-kilowatt generating unit and two miles line for street and house lighting.

Tex., Yoakum.—W. Lauder contemplates erection of turbine water-power plant. (See "Machinery Wanted.")

Va., Falls Church.—City is considering improvements to electric-light system. Address The Mayor.

Va., Holland.—City is considering construction of electric-light plant. Address The Mayor.

W. Va., Millville.—Winchester & Washington City Railway Co., Winchester, Va., awarded contract to Henry S. Rippel, 7 Clay St., Baltimore, Md., for erection of steam-power plant recently noted; fireproof construction; electric lighting; cost \$40,000; plans by P. O. Keilholts, Baltimore, Md. (See "Machinery Wanted.")

W. Va., Wheeling.—Schenerlein Roofing & Supply Co. will install electric-light plant; equipment includes 15-horse-power engine for operating dynamo.

FLOUR, FEED AND MEAL MILLS

Ga., Vesta.—Cunningham, Stevens & Co. incorporated with \$10,000 capital stock by J. C. G. Stevens and others. (See "Cotton Compresses and Gins.")

Ky., Skilesville.—Craig Bros. will probably rebuild burned corn mill.

Tenn., Morristown.—Huggins & Williams, proprietors Cumberland Mills, have mainly purchased machinery for mill recently noted to be enlarged; capacity, 50 barrels; construction of building by owners. (See "Machinery Wanted.")

Tenn., Nashville.—Ezell Mill & Stone Co. incorporated with \$25,000 capital stock by James B. Ezzell, J. L. Shannon, P. M. Clark and others.

Tex., Pecos.—Pecos Alfalfa Milling Co. will be name of company recently noted organized with \$25,000 capital stock to establish alfalfa meal mill; J. B. Sisk to be manager; awarded contract to local contractor for erection of 28x130-foot 4000 building and \$1000 office structure, of galvanized corrugated iron; will manufacture pea green alfalfa meal, alfalfa meal and corn mixed.

Tex., San Angelo.—John Bludworth, Gatesville, Tex., will be manager of proposed flour mill; contract for erection awarded to Paul Garrett, McGregor, Tex.; daily capacity, 125 barrels of flour; cost \$25,000.

FOUNDRY AND MACHINE PLANTS

Ga., Rome.—Pea Huller, Sawmills, etc.—Sanders Manufacturing Co. (recently reported incorporated with \$50,000 capital stock) will manufacture pea huller, sawmills and compost drills; cost of machinery \$3000; awarded contract for erection of two-story building, 30x100 feet in size, of mill construction; J. M. Sanders, president; J. Cumming, vice-president; E. P. McGhee, secretary-treasurer. (See "Machinery, etc., Wanted.")

La., Lake Charles.—Generators, Motors, etc. Company is being organized with H. M. Bradley president to establish foundry and machine plant and to manufacture patented electric-light generator and reversible four-cycle marine motor invented by Mr. Bradley.

Md., Baltimore.—Machine Shop.—Charles Zies, 318 South Fremont Ave., will erect addition at 320-322 South Fremont Ave. for machine shop.

Mo., St. Louis.—Quick Meal Stove Co., Louis Stockstrom, manager, will open bids May 1 for erection of stove foundry recently noted; 200,000 square feet; cost \$200,000; will install machinery to cost \$50,000; 600 stoves daily capacity; plans by E. C. Jansen, St. Louis; Louis Stockstrom, engineer in charge. (See "Machinery Wanted.")

Mo., St. Louis.—Switch Plant.—Hurst Automatic Switch Co., C. M. Hurst, president, Rawlins, Wyo., contemplates establishment of \$125,000 plant to manufacture automatic railroad switches.

N. C., Asheville.—Machines.—West Pulverizing Machine Co. will be incorporated with \$25,000 capital stock; A. Lincoln West, president; to establish plant to manufacture machine for pulverizing and grinding talc, graphite, asbestos, etc.; patented by Mr. West; plan is to erect foundry, steel-plate house, several warehouses and cottage for workmen; W. G. West, Jr., will be manager.

Okla., Oklahoma City.—Plows.—Harry B. Houghton is interested in establishment of branch plant by Pennsylvania Plow Co.

S. C., Denmark.—Machines.—Denmark Machine Works, L. Blount & Son, proprietors, will erect 24x60-foot concrete fireproof machine shop recently noted; later will erect 24x40-foot foundry; frame construction, with galvanized-iron siding and felt roof; no machinery needed.

Tenn., Cleveland.—Machine Shop.—D. W. Meyers, Athens, Tenn., will erect machine shop; one story; 30x38 feet; concrete construction.

Tenn., Knoxville.—Foundry.—Wm. J. Oliver Manufacturing Co. will enlarge plant.

W. Va., Charleston.—Pumps, etc.—Virginia Electric & Supply Co. incorporated with \$10,000 capital stock by C. F. Scholtz, James F. Schwalm, Edwin M. Keatley and others.

GAS AND OIL DEVELOPMENTS

Ala., Lafayette.—City voted bond issue for electric-light plant. Address The Mayor.

Ark., Texarkana.—Offenhaus Oil Co. organized with \$40,000 capital stock; T. A. Sims, president; G. W. Fouke, vice-pres-

ident; F. W. Offenhaus, secretary-treasurer; will develop 40 acres of oil and gas lands in Caddo field.

Ga., Atlanta.—Paulding County Power Co., lately reported incorporated, is reorganization of Paulding County Electric Power Co.; will complete water-power-electric plant previously under construction; General Contracting & Construction Co. in charge of building dam, constructing transmission lines, etc.; W. H. Bangs, engineer in charge; Paulding offices at 1107 Candler Bldg.

Ga., Savannah.—Texas Company of Louisiana, M. H. Gwynn, auditor, New Orleans, La., contemplates establishment of distributing plant.

Okla., Bartlesville.—Carwood Oil Co. incorporated with \$12,000 capital stock by P. H. Woods, St. Louis, Mo.; Edward S. Carter and William M. Carter, both of Bartlesville, and others.

Okla., Bartlesville.—Interocean Oil Co. incorporated with \$10,000 capital stock by J. F. Barlow, H. V. Dorman and G. C. Adams.

Okla., Tulsa.—State Gas & Oil Co. incorporated with \$10,000 capital stock by E. States, J. S. Davis and Charles Richardson.

Okla., Claremore.—Gld Oil & Gas Co. incorporated with \$10,000 capital stock by James Scott, William G. Payne, John T. Ezzard and W. L. Kistler.

Okla., Grove.—Grove Oil, Gas & Mineral Co. organized with \$10,000 capital stock; W. P. Mayes, president; J. H. Gibson, vice-president; J. G. Austin, secretary-treasurer.

Okla., Nowata.—Comet Oil Co. incorporated with \$10,000 capital stock by A. L. Farmer, A. E. Durah, both of Tulsa, Okla., and W. B. Tucker of Coffeyville, Kans.

Tex., Graham.—Citizens contemplate sinking 2000 or 2500-foot well to prospect for gas, oil and water; John C. Kay will furnish desired information. (See "Machinery Wanted.")

Tex., Markham.—Danner Oil Co. organized with R. Danner, president; George R. Burke, secretary-treasurer.

W. Va., Crawford.—Rural Gas Co. incorporated with \$25,000 capital stock by E. G. Davison of Crawford, J. W. Ross, John B. Mitchell, both of Weston, W. Va., and others.

W. Va., Flemington.—Flemington Oil & Gas Co. incorporated with \$10,000 capital stock; John B. Cather, president; C. Lee Reynolds, vice-president; I. D. Martin, secretary; C. F. Monroe, treasurer; P. H. McGrady, general manager; will develop 3000 acres of land.

W. Va., Shinnston.—Bryan Gas & Oil Co. incorporated with \$10,000 capital stock by W. D. Bryan, S. B. Davis, L. E. Hawkins and others.

ICE AND COLD-STORAGE PLANTS

Ark., Corning.—G. A. Booser will establish ice plant.

Ark., Little Rock.—Little Rock Brewing & Ice Co. awarded contract to E. A. Steinelinger Construction Co., St. Louis, Mo., for erection of addition to plant for storage department; two stories; pressed brick; reinforced with concrete; cost \$30,000.

Md., Baltimore.—National Ice Corporation incorporated with \$50,000 capital stock by J. Leiper Winslow of 116 East Lexington St., Baltimore; George C. Steigle and H. W. Nock, both of Wilmington, Del.

Miss., Columbus.—Manuel Dandadeke, proprietor Columbus Belle Hotel, will install ice-making plant.

S. C., Orangeburg.—Orangeburg.—Orangeburg Ice Manufacturing Co. incorporated with \$20,000 capital stock; P. Moses, president; E. H. Moses, vice-president and general manager; R. H. Jennings, secretary-treasurer; purchased plant of Crystal Ice Co. for \$17,000 and will continue operation.

Tenn., Chattanooga.—Independent Ice & Coal Co., J. A. Wardlaw, treasurer and general manager, will increase capacity from 40 tons to 50 tons of ice daily.

Tex., Boerne.—Boerne Dairy Feed Co., L. W. King, president, recently noted to establish ice plant and creamery, will erect five buildings; ordinary construction; cost \$1500; machinery purchased; plans by company; no contracts.

Tex., Huntsville.—Huntsville Ice Co. incorporated with \$6000 capital stock by J. G. Ashford, C. G. Barrett, T. C. Gibbs and others.

Tex., Marfa.—Marfa Electric Light & Ice Co. incorporated with \$5000 capital stock by W. H. Cleveland, A. M. Porter, T. C. Mitchell and others.

Tex., Pearsall.—Pearsall Water, Ice & Light Co. incorporated with \$50,000 capital stock by George F. Hinds, J. J. Little, John T. Bivens and others.

LAND DEVELOPMENTS

Ala., Birmingham.—Jefferson Improvement Co. incorporated with \$12,500 capital stock; W. P. Blair, president and treasurer; G. E. Coffman, vice-president and manager.

Ala., Ensley.—Corey Land Co., Robert Johnson, Jr., president, Birmingham, Ala., opens bids March 19 for paving, sewer construction, street improvements, etc.; in connection with development of industrial city named Corey; first contract will amount to about \$150,000; total expenditure contemplated, \$396,000; detailed figures stated last month; engineers in charge, Meade & Huey, Birmingham. (See "Machinery Wanted.")

Fla., Tallahassee.—Florida Home Development Co. incorporated with \$10,000 capital stock; John H. Bell, president; George W. Saxon, vice-president and treasurer; Wm. A. Bell, secretary.

Miss., Vicksburg.—Southern Land & Timber Co. incorporated with \$10,000 capital stock by R. L. Crook, C. M. Lawrence, C. E. Crooks and Marye Dabney.

Mo., St. Louis.—A. H. Frederick purchased 10 acres of land on Fyler St., near Sulphur, and is interested in organization of company to develop; plan to subdivide into 50-foot building lots, install sewers, cut through streets, erect dwellings, etc.

Okla., Oklahoma City.—Euclid Place Development Co. incorporated with \$25,000 capital stock by J. S. Anderson, B. L. Woodworth, both of Oklahoma City, and W. R. Welch, Guthrie, Okla.

Okla., Oklahoma City.—West Packingtown Development Co. incorporated with \$25,000 capital stock; H. B. Houghton, president; W. M. Sawyers, vice-president; J. H. Jefferson, secretary-treasurer.

S. C., Camden.—Jack Young and H. D. Henry purchased 30 acres of land and will grade, clear, subdivide and develop as residential section.

S. C., Spartanburg.—Magness Trust Co., W. T. Magness, president (recently noted purchasing 24 acres of land for residential section) will construct sewerage and water system, install electric and gas lights, pave and curb; H. Stribling, engineer in charge, Spartanburg; company contemplates development of townsite known as Ben Avon.

Tenn., Chattanooga.—Highland Land Co. incorporated with \$10,000 capital stock by J. L. Foust, W. H. Payne, Jr., R. I. McWright, Jr., and others.

Tenn., Nashville.—Belle Meade Co. organized with J. O. Leake president, E. L. Hampton vice-president, D. A. Shepherd secretary-treasurer, C. B. Horn assistant secretary-treasurer; purchased 1600 acres of Belle Meade farm; will divide into small tracts from five acres up and make other improvements.

Tenn., Nashville.—Ridgefield Land Co. purchased 20 acres of land and will develop as residential park; will construct brick wall, subdivide into one and two acre lots, etc.

Tex., Dallas.—Jackson Land Co. incorporated with \$15,000 capital stock by T. S. Rollins, Jr., W. R. Sargeant and Mrs. J. C. Coney.

Tex., Greenville.—Greenville Development Co. incorporated by A. R. Nicholson, H. A. Barsun and J. A. Phillips.

Tex., Houston.—Interurban Land Corporation incorporated with \$100,000 capital stock; W. W. Porch, president; W. H. Ward, treasurer; J. A. Friedman, secretary; develop 3500 acres of land between Galveston and Houston, including town of Genoa; will erect buildings, construct shell roads, subdivide into home building sites, etc.; expend \$10,000 for improvements.

Tex., Houston.—Joe H. Eagle purchased 5500 acres of land for \$230,000 and will develop resort town; remodel 40-room hotel; replat to give eight miles of water-front; construct 100-foot wide boulevard extending from center of town to railroad tracks and cement sidewalks; install sewer, electric-light and water systems, erect cottages, business blocks, school, postoffice, etc., including erection of school for boys with capacity of 300 to 400 pupils; construct electric railway to connect with railroads at Dickinson and League City.

Tex., Lobo.—Lobo Land & Irrigation Co., F. A. Smith, president, P. O. Box 123, Crockett, Tex., has purchased town of Lobo and will develop; also purchased several thousand acres of farm lands surrounding townsite, and will subdivide into 20 and 40-acre tracts each; contemplates construction of irrigation system; J. E. Mitchell, engineer in charge, Crockett, Tex.

Tex., San Antonio.—J. P. Withers and associates purchased 3000 acres of land and will develop as residential section; will construct 300-foot-wide boulevard, provide transportation facilities, etc.

Tex., San Antonio.—Conception Land Co. incorporated with \$25,000 capital stock by J. G. Fowler, C. S. Fowler and C. E. Sprague.

Tex., Shu City (not a postoffice).—Shu City Land Co., Room 6, Krupp & Tuffy Bldg., Houston, Tex., will establish townsite on Santa Fe Railroad midway between Pearland and Alvin; awarded contract to W. S. Delery, Houston, for 27 miles grading; contemplates granting franchise for electric-light and power plant and erection of shoe factory; promoting establishment of canning factory and erection of church and school.

LUMBER-MANUFACTURING PLANTS

Ark., Cotton Plant.—S. M. Bush and associates of Sinclairville, N. Y., will establish veneer plant.

Ark., Hot Springs.—Garland Timber & Lumber Co. increased capital stock from \$50,000 to \$100,000.

Fla., Tampa.—J. E. Tracy, Mastings-on-the-Hudson (not a postoffice), N. Y., is promoting establishment of sawmill with daily capacity of 25,000 feet of lumber; he is registered at the Virginia House, Tampa.

Ga., Homerville.—Georgia Lumber & Turpentine Co. will be incorporated with \$100,000 capital stock; purchased timberlands and will erect sawmill, operate turpentine plants, etc.

Ga., Vesta.—Cunningham, Stevens & Co. incorporated with \$10,000 capital stock by J. C. G. Stevens and others. (See "Cotton Compresses and Gins.")

Md., Prince Fredericktown.—G. D. Turner will rebuild sawmill, etc., recently reported burned; erect 20x60-foot building with cement posts, iron siding and asbestos roof; will use old machinery repaired.

Miss., Hickman.—Progress Lumber Co., Columbia, Miss., purchased holdings containing 23,000,000 feet of timber; will purchase 17,000,000 additional feet and establish plant.

Miss., Lexie.—Pike County Lumber Co., F. H. Cline, president, will probably begin construction within 60 or 90 days of planing mill recently noted; has completed structural work on proposed sawmill and steam drykiln; planing mill to have one or two machines; sawmill capacity about 125,000 feet per 22 hours; Cline-Holmes Lumber Co., Hattiesburg, Miss., exclusive sales agent.

Miss., Paulding.—G. R. Green will establish sawmill.

Mo., St. Louis.—Cain-Hurley Lumber Co. incorporated with \$25,000 capital stock by E. M. Cain of St. Louis, John T. Hurley of Webster Groves, Mo., and Eugene C. Slevin of Ferguson, Mo.

Okla., Ada.—Ada Planing Mill Co., G. W. Young, manager, will erect planing mill recently noted; cost \$5000; main office, Vallant, Okla.

Tenn., Nashville.—Tennessee Hardwood Lumber Co. incorporated with \$50,000 capital stock by T. B. Johnson, Geo. W. Killebrew, John Bransford and others.

Tex., Falfurrias.—Starr Lumber Co. incorporated with \$9000 capital stock by J. R. Castleberry, J. J. Flewellen and R. J. McIntyre.

Tex., Holland.—Holland Lumber Co. incorporated with \$10,000 capital stock by J. V. Cavitt, A. E. Wilkerson and H. S. Williams.

Tex., Kerrville.—Davidson Lumber Co. incorporated with \$9000 capital stock by J. J. Davidson, A. C. Hawkins and Henry Welge.

Va., Bristol.—Cloyd Bros. Company incorporated with \$25,000 capital stock; S. M. Cloyd, president; D. W. Birdwell, secretary-treasurer; M. M. Cloyd, vice-president.

Va., Coeburn.—Mill Creek Lumber Co., organized by L. F. Jackson of Honaker, Va.; W. N. T. J. and H. C. Jackson, all of Coeburn, Va.; purchased 10,000,000 feet virgin stumpage in Wise county and will install cutting plant near Greene with daily capacity of 15,000 feet.

Va., Portsmouth.—Phillips & Mahoney Company, Joseph W. Phillips, president, will open bids October 1 for construction of \$3000 fireproof building recently noted; machinery to be installed will cost \$8500; bids opened October 1.

Va., Richmond.—Jarratt Lumber Corporation incorporated with \$100,000 capital stock; A. C. Diggs, president; J. W. Massie, secretary; L. W. Dunn, treasurer.

METAL-WORKING PLANTS

N. C., Wilmington.—Cans.—Wilmington Manufacturing Co. incorporated with \$100,000 capital stock by David Ray, Cuthbert Martin and John R. Murchison.

Okla., Enid.—Wire Fabric, etc.—Oklahoma Steel, Iron Wire Fabric Co. incorporated with \$50,000 capital stock by E. W. Hayes, W. E. Richardson and L. E. Bussong.

Okla., Enid.—Wire Fence, etc.—C. A. Halt, Denver, Col., is considering Enid as location of proposed plant for manufacturing wire fencing, iron posts and bridge work; plans erection of \$30,000 building.

Okla., Oklahoma City.—Fire-escapes.—John Weing contemplates establishment of plant to manufacture steel chute stairway fire-escapes; cost of plant \$50,000.

S. C., Cheraw.—G. W. Martin contemplates manufacture of rural mail box and coin box; invention by Mr. Martin. (See "Machinery Wanted.")

W. Va., Wheeling.—Grafton Construction Co. will be incorporated (probably under different name) and will install stamping presses for manufacturing sheet-metal stamped and piece ware and metal specialties.

MINING

Fla., Bartow.—Phosphate.—Howe, Norris & Co., 50 Broadway, New York, have taken over property of South Florida Phosphate Co.; about 900 acres land pebble deposits; contemplate construction of plant with capacity of 50,000 tons; date of opening machinery bids to be announced later; J. Fred Beatey, engineer in charge. (Recently noted.)

Ga., White Path.—Gold.—White Path Gold Mining Co. incorporated with \$100,000 capital stock by Thomas H. Tabor, L. C. Tabor and F. C. Tabor.

Ky., Crittenden.—Spar, Lead and Zinc.—William Bibble, Birmingham, Ala., leased property in Crittenden county containing spar, lead and zinc, and will develop.

Mo., Columbia.—Zinc.—F. W. Niedemeyer is interested in development of zinc lands.

Mo., St. Louis.—Blue Mountain Mining Co. incorporated with \$3000 capital stock by William Einstein, Frederick Wedman and Leo Rassieur.

Mo., Joplin.—Lead and Zinc.—Hackett Mining Co. incorporated with \$100,000 capital stock by G. F. Newburger of Joplin, George Keurberger, Zade A. Metzler and Louis B. Epstein, all of New York.

Okla., Ardmore.—Asphalt.—Chickasaw Asphalt Co. is name of company to develop 560 acres of asphalt land (recently noted to be developed by T. W. Garbutt, Atlanta, Ga.); T. W. Garbutt, president-manager; C. G. Spindlee, secretary. (See "Machinery Wanted.")

Tenn., Kingsport.—Slate.—Kingsport Slate Corporation leased land on Slate Branch containing slate deposits and will develop; will manufacture roof shingles, etc.; also reported to construct bridge across Holston River.

Tex., Van Horne.—Mica.—Texas Mica Co. will, it is reported, expend \$25,000 for developing mica deposits 15 miles from Van Horne; will install machinery.

MISCELLANEOUS CONSTRUCTION WORK

Fla., Fernandina.—Docks.—J. H. P. Merrow purchased 200 feet of water front; will construct docks for use of S. R. Merrow Company.

La., Crowley.—Levee.—United Irrigation & Rice Milling Co. will construct 50,000 yards of levee; bids invited. (See "Machinery Wanted.")

N. C., Raleigh.—Dyke.—Directors of State's Prison, George A. Norwood, Goldsboro, N. C., chairman, contemplate replacing dyke on Roanoke River destroyed by flood; estimated cost of dyke about 400 yards long is \$10,000, and one following river bank, of about one mile in length, which would enclose 75 to 100 acres, is \$25,000.

S. C., Charleston.—Piers.—Simons-Mayrant Company of Charleston has contract at \$47,578 for construction of torpedo piers at Charleston navy-yard.

MISCELLANEOUS ENTERPRISES

Ala., Gadsden.—Poultry Farm.—E. C. Kepner purchased 106 acres of land; will establish poultry and truck farm.

Fla., St. Augustine.—Farm.—Clay Bottom Farm Co. incorporated with \$25,000 capital stock by Heth Canfield, Thomas S. Canfield and Roy Canfield.

Ga., Atlanta.—Printing.—Sisson Printing Co. incorporated with \$10,000 capital stock by Lella L. Sisson, Charles A. Sisson, M. M. Hill and Hugh J. Lynch.

Ga., Savannah.—Garage.—Knoxville Auto & Garage Co. awarded contract to S. M. Beaumont Co., Knoxville, for erection of garage;

Sixty-five feet; truss roof; one story and basement; cost \$10,000. (Previously mentioned.)

Ky., Louisville.—Coal and Feed.—Enterprise Coal & Feed Co. incorporated with \$7000 capital stock by Louis Autz, Andrew S. Schmitt and Joseph Maennlinghoff.

La., Lake Charles.—Printing.—Davis Printing Co. incorporated with \$4000 capital stock; W. R. Davis, president.

La., New Orleans.—Motor Cars.—Demack Motor Car Co. incorporated with \$50,000 capital stock by George E. Demack, William S. Rogers and J. H. Gomila.

La., New Orleans.—Paper.—Diamond Paper Co. incorporated with \$25,000 capital stock; Henry C. Chisholm, president; Eugene Gerde, vice-president; John W. Huggett, secretary-treasurer.

Md., Betterton.—Pleasure Resort.—Dreamland Park Amusement Co. organized with \$50,000 capital stock; F. P. Angeller, president, 1 Gilmer La., Baltimore, Md.; Louis Angeller, secretary-treasurer, 1 Gilmer La., Baltimore, Md.; leased 10 acres of land on Chesapeake Bay adjoining Betterton, and will establish pleasure resort.

Miss., Gulfport.—Steam Laundry.—Coast Steam Laundry Co. incorporated with \$10,000 capital stock by E. E. Moore, C. E. Whittington, both of Gulfport, and W. G. Dailzell of Biloxi, Miss.

Miss., Hattiesburg.—Slaughter-house.—City will establish union slaughter-house. Address The Mayor.

Miss., Hazlehurst.—Resort.—Browns Wells Company organized with \$50,000 capital stock by J. S. Sexton, G. W. Covington, R. L. Covington and others; will expend several thousand dollars for improvements to Browns Wells; will remodel grounds and buildings, construct macadam roads, etc.

Mo., Liberty.—Steam Laundry.—Liberty Steam Laundry Co. incorporated with \$12,000 capital stock by George E. Swan, Anna A. Swan and Ben. F. Swan.

Mo., St. Louis.—Rubber Stamps and Seals.—Banner Rubber Stamp & Seal Co. incorporated with \$5000 capital stock by Robert H. Bischoff, Theodore W. Kisker and Alexander Light.

Mo., St. Louis.—Publishing.—Labor Publishing Co. incorporated with \$15,000 capital stock by William Brandt, L. P. Philippi, Joseph Glader and others.

Mo., St. Louis.—Contracting.—F. Schirm Contracting Co. incorporated with \$2000 capital stock by F. Schirm, C. F. Schirm and William Schirm.

N. C., Roxboro.—J. B. Harvie is interested in formation of company to establish redrying plant; will erect building to cost \$15,000 and install machinery. (See "Machinery Wanted.")

Okla., Sapulpa.—Publishing.—L. G. Hyck, Joplin, Mo., will erect building and publish daily newspaper; company is being organized with \$100,000 capital stock.

Okla., Tulsa.—Incinerator.—City voted \$25,000 worth of bonds to construct incinerator. Address The Mayor. (Recently noted.)

S. C., Anderson.—Construction.—Anderson Granite & Construction Co., recently reported organized, will conduct general marble and granite construction enterprise; C. J. Beauchamp, president; M. B. Smith, secretary. (See "Machinery Wanted.")

S. C., Anderson.—Abattoir.—R. D. Henderson, previously noted to establish abattoir and fertilizer factory, awarded contract for cement work to J. L. & D. H. Masters, Anderson, and for carpentry to C. C. Garrison and S. A. Clark, Anderson; plan calls for three main buildings to abattoir, beside two or three sheds, 15x50 feet, for hogs; killing-house, 29x55 feet; rendering-house, 25x35 feet; cattle barn, 30x50 feet; will sink wells for cleansing killing-houses, etc.; cost \$6000.

S. C., Florence.—Publishing.—Hartwell M. Ayer, owner and publisher of Florence Daily Times, will erect plant to replace present structure; three stories; brick, iron and stone.

S. C., Greenville.—Printing.—Peace Printing Co. incorporated with \$10,000 capital stock by J. F. Richardson and B. H. Peace.

S. C., Rock Hill.—Electric Fixtures, etc.—Lyle Electric Co. incorporated by R. Hill, Frank L. Hoffman and W. Lyle Black.

Tenn., Bristol.—L. L. C. Smith will establish \$5000 industrial plant.

Tenn., Lebanon.—Publishing.—Lebanon Democrat will erect addition to plant; 40x52 feet; fireproof construction; cost \$2000; day's labor. (See "Machinery Wanted.")

Tenn., Memphis.—Amusement Device.—Memphis Riding Device Co. (recently reported incorporated with \$10,000 capital stock to establish amusement device) will erect \$11,000 wooden building; H. L. Breinig, contractor

and architect, Terre Haute, Ind.; H. L. Breinig, president; A. B. Morrison, manager.

Tenn., Morristown.—Grant-Hasson Hard ware Co., Charles Andre, manager, increased capital stock to \$50,000. (Recently incor porated as Grant-Hasson Hardwood Co.)

Tenn., Nashville.—School Supplies.—Eco nomic School Supply Co. incorporated with \$20,000 capital stock by A. E. Booth, J. H. Booth, S. T. Johnson and others.

Tenn., Nashville.—Motor Cars.—Howard-Cregor Company incorporated with \$50,000 capital stock by E. H. Howard, L. M. Cregor, H. L. Sperry and others.

Tenn., Nashville.—Grain Elevator.—Mero Warehouse & Elevator Co. incorporated with \$25,000 capital stock by J. H. Fall, J. T. Howell, Henry Sperry and others.

Tex., Bryan.—Laundry.—W. O. Hearne will rebuild steam laundry reported burned; loss \$7500.

Tex., Boerne.—Creamery.—Boerne Dairy Feed Co., recently noted to establish cream ery and ice plant, will erect buildings; ma chinery purchased. (See "Ice and Cold-Storage Plants.")

Tex., Dallas.—Automobiles.—Mitchell Auto Co. incorporated with \$10,000 capital stock by T. E. Harvey, R. C. Harvey, C. S. Staten and E. T. Staten.

Tex., El Paso (R. F. D. from Itaska).—Laun dry.—Presbyterian Home and School for Or phans, Dr. Junius B. French, president, awarded contract to Troy Laundry Co. for erection of laundry recently noted; brick construction; machinery purchased.

Tex., San Antonio.—Construction.—Alken Cement House Co. of Texas incorporated with \$10,000 capital stock by C. T. Fincham, G. C. Simpson, Robert Maverick and Parke R. Longworth.

Tex., San Antonio.—Printing Plant.—Maver ick-Clarke Lithographing Co., Soledad St., will erect printing plant to replace present structure.

Tex., Yoakum.—Will and Leonard Orth awarded contract for garage; two stories; corrugated iron; cement floors and founda tion.

Va., Altavista.—Publishing.—Altavista Printing Co. incorporated with \$10,000 capital stock; W. J. Quick, president; W. M. Hund ley, vice-president; P. H. McGill, secretary; will publish newspaper.

Va., Lynchburg.—Incinerator.—City awarded contract at \$21,250 to Decarie Incinerator Co., Minneapolis, Minn., for construction of incinerator plant. (Recently mentioned.)

Va., Portsmouth.—Stationery.—Virginia Pa per & Art Co. incorporated with \$25,000 capital stock; J. F. Pace, president; C. L. Mur phy, secretary; S. C. Pace, treasurer.

W. Va., Parkersburg.—Steam Heat.—W. A. Hersch applied for franchise to manufac ture and sell steam heat.

W. Va., Ravenswood.—Creamery.—Ravens wood Creamery Co. incorporated with \$5000 capital stock by J. V. Proctor, F. E. White and F. A. Harpoid; will erect 30x60-foot building; concrete blocks; gas lighting; cost \$1200; construction by company.

MISCELLANEOUS MANUFACTUR- ING PLANTS

Ala., West Blocton.—Bottling.—Standard Bottling Works, Crawford Johnson, presi dent, awarded contracts to J. H. Deason and T. J. Vickery for erection of 25x75-foot building; ordinary construction; plans by W. R. Young, West Blocton. (Recently in correctly noted at Blocton.)

Ark., Fort Smith.—Trousers.—Woods Manu facturing Co., it is reported, will erect addi tional story to building and install 15 addi tional machines.

Ark., Mena.—Brooms.—J. C. Steed will es tablish broom factory; machinery purchased.

Ark., Mena.—Brooms.—Canning, Shipping & Manufacturing Co. will establish broom fac tory.

Ark., Sylamore.—Lime.—Arkansas Lime Co. incorporated with \$50,000 capital stock; Geo. R. Case, president; H. R. Case, vice-presi dent; W. F. Perrin, secretary; Junius R. Case, treasurer.

Ky., Lexington.—Dumping Wagons.—Dayton (O.) Dumping Wagon Works com pletes organization of \$70,000 company to establish plant for manufacturing dumping wagons for excavating contractors, coal deal ers, etc.

Ky., Louisville.—Advertising Novelties.—Photograph Manufacturing Co. incorporated with \$7000 capital stock; Alvin L. Mayor, president; E. E. Strauss, vice-president; Leo pold Levy, secretary-treasurer.

Ky., Mayfield.—Gas Plant.—B. A. Ward, Memphis, Tenn., is promoting establishment of \$30,000 gas plant.

La., Franklin.—Sugar Refinery.—Sterling Sugar & Refining Co., Godchaux Bldg., will make improvements to plant; will install 10-foot pan, four new centrifugals and Dutch oven, with four oil burners, new vacuum pumps, etc.; machinery to cost \$25,000; in stallation by company's force; Paul Ferriat, engineer, Franklin; no building; daily ca pacity of plant, 2000 tons cane ground, 350,000 pounds sugar made.

La., Houma.—Sugar.—Walter J. Southon will rebuild burned sugar-house on Honduras plantation in Terrebonne parish; capacity 500 to 600 tons of cane per 24 hours; will have two pans, triple effect, etc.; equipment purchased.

La., New Orleans.—Bottling.—Champion Bottling Co. incorporated with \$3000 capital stock by A. Vizard, D. B. H. Chaffe and Le Roy Snyder.

La., Plaquemine.—Brooms.—O. L. Plauché will establish power broom factory.

La., Roseland.—Creamery.—Roseland Cream ery organized with \$5000 capital stock; John M. Chapin, president; Leslie M. Bankston, vice-president; S. E. Hostetter, secretary-treasurer. (Recently mentioned.)

Md., Baltimore.—Organs.—William Bardoff, 119 Kenwood Ave., will erect organ factory on 10th St., near Baltimore St., Highland town; two stories; brick; 22x60 feet.

Md., Baltimore.—Brooms.—S. A. Rippel & Bros., 1137 Burgundy Al., awarded contract to Henry S. Rippel, 7 Clay St., Baltimore, for erection of factory recently noted; three stories; 32x12 feet; ordinary construction; slag roof; cost \$1000; plans by owner. (See "Machinery Wanted.")

Md., Baltimore.—Bakery.—E. H. Koester, 894 West Baltimore St., will erect one-story brick bakery at 637-639 Pennsylvania Ave.; 30x56 feet; steam heat; cost \$3000.

Md., Baltimore.—Brooms.—Atlantic Broom Co., 502 Law Bldg., purchased tract of land on 7th St., Canton, and will establish broom factory; temporary plant in old car barn on purchased site; Robert C. Norman will be manager.

Miss., Greenville.—Bottling.—Coca-Cola Bot tling Works, Chattanooga, Tenn., contem plates establishment of plant.

Miss., Greenville.—Bottling.—Harry C. Spence, Memphis, Tenn., will establish bot tling plant.

Miss., Gulfport.—Thomas Cotton Ficker Co., W. H. Bouslong, president, increased capital stock from \$50,000 to \$100,000.

Mo., Kansas City.—Chemicals.—Keysoll Chemical Co. incorporated with \$50,000 capital stock by C. W. Pyle, G. Elvin and others.

Mo., Kansas City.—Coffee Tins and Pack ages.—Gatlin Manufacturing Co. will erect plant at 817-19 Broadway; seven stories; brick; 48x142 feet; cost \$50,000; will equip for manufacturing tins and packages.

Mo., St. Louis.—Paper.—Hagen Paper Co. incorporated with \$25,000 capital stock by Henry Hagen, Jr., Arthur N. Lay, Theodore H. Shiff, George Lay and others.

Mo., St. Louis.—Badges and Regalia.—George E. Benz Badge & Regalia Co. incor porated with \$15,000 capital stock by George E. Benz, Jr., Eugene A. Benz and Charles A. Beamer.

Mo., St. Louis.—Distillery.—Pure Food Dis tillery Co. incorporated with \$2000 capital stock by Hugo A. Koelle, Floyd B. Gill and George J. Endler.

Mo., St. Louis.—Sporting Goods.—Rawlings Manufacturing Co. will erect addition to plant; 40x145 feet; two stories; cost \$20,000.

N. C., Morgantown.—Knot-Tieing Machine.—P. B. Parks and M. G. Singleton will orga nize company to manufacture patented knot tieing machine.

N. C., Stanley.—Creamery.—Creamery Pack age Co., Chicago, Ill., will erect creamery to be operated as Stanley Creamery Co.

Okla., Altus.—Stone.—Altus Hydraulic Stone Co. organized with M. A. Snyder president, J. G. Adkins vice-president, W. A. Davis sec retary and general manager, J. P. Orr treas urer; will establish hydraulic stone plant; machinery purchased.

Okla., Okmulgee.—Refinery.—Creek Refining Co. organized with \$40,000 capital stock; C. S. Dawley, president; O. E. Filley, sec retary; F. A. H. Fish, treasurer; will establish refinery; equipment and materials purchased.

Tenn., Huntingdon.—Bottling.—Southern Ice & Cold Storage Co. will establish bottling plant.

Tenn., Knoxville.—Trousers.—Briscoe Man ufacturing Co., 414 North Gay St., is hav ing plans prepared for three-story brick build ing on State St.

Tenn., Memphis.—International Stock Food Co., Minneapolis, Minn., will soon begin con struction of proposed plant of International

Sugar Feed Co. for manufacturing stock feed; daily capacity 300 tons.

Tenn., Memphis.—Paint.—Corlis-Emerson Paint Co. incorporated with \$10,000 capital stock by Frank Corlis, J. B. Emerson, George Higgins and others.

Tenn., Unaka.—Chemicals.—Unaka Chemi cal Corporation incorporated with \$10,000 cap ital stock by H. S. McGonigle, M. P. Dyer, Hyram Abramson and others.

Tex., Clarendon.—Creamery.—Donley County Creamery Co. incorporated with \$5000 capital stock by J. B. McClelland, Harry Weatherly and I. W. Carhart.

Tex., Houston.—Refrigerators.—Dewey Sys tem Refrigerator Co. incorporated with \$200, 000 capital stock by Ellsworth A. Dewey, W. P. Gribble, J. W. Teague and others.

Tex., Houston.—Bottling.—Houston Soda Bottling Co., L. F. Schweikert, president (recently reported incorporated with \$35,000 capital stock), will manufacture carbonated beverages and distill water.

Tex., Houston.—National Biscuit Co., New York, will erect plant to replace present structure; fireproof construction; reinforced concrete; will increase capacity two and a half times; cost \$250,000.

Tex., Pilot Point.—Creamery.—Pilot Point Creamery Co. incorporated by D. J. Mitchell, August Michalek and R. A. Wright.

Tex., Quanah.—Alverson & Crowder will es tablish broom factory.

Va., Holland.—Peanuts, etc.—Holland Sup ply Co. incorporated with \$15,000 capital stock; T. H. Birdsong, president, Courtland, Va.; W. I. Peele, vice-president; J. T. Rawls, secretary-treasurer, both of Holland; awarded contract to E. C. Smith, Franklin, Va., for erection of 48x100-foot building; or dinary construction; cost \$4000. (See "Ma chinery Wanted.")

Va., Lynchburg.—T. R. Davis Co. incor porated with \$10,000 capital stock; T. R. Rob erts, president; James R. Ford, treasurer; R. C. Blackford, secretary.

Va., Richmond.—Estate of Joseph Bryan will expend \$3350 for repairing factory build ing at 8-10-12 10th St.

Va., Richmond.—Factory.—W. H. Hendricks, 10 South 21st St., is interested in factory building for which plans are being prepared; brick structure, with terra-cotta or stone trimmings; 40,000 square feet floor space; steel or concrete interior construction; ele vators. (See "Machinery Wanted.")

W. Va., Charleston.—Beverages.—Kanawha Celera Cola Co. incorporated with \$10,000 cap ital stock by Le Roy Clemens, John W. Hall, J. P. Clark and others.

W. Va., Clarksburg.—Door Plates.—Clarksburg Door Plate Co. incorporated with \$10, 000 capital stock by Emory McClung, Lloyd Crane, John B. Payne and others; will man ufacture McClung door plate and indicator.

W. Va., Keyser.—Tannery.—Central Leather Co., main office New York, will, it is re ported, erect tannery.

W. Va., Wheeling.—Springs and Axles.—Western Spring & Axle Co. incorporated with \$50,000 capital stock by George A. Laughlin, Frank C. Hoffman, Andrew Reltz and others; will erect factory building in Love land.

RAILWAY SHOPS, TERMINALS, ROUNDHOUSES, ETC.

Fla., Jacksonville.—Florida Railway award ed contract to Florida Construction & Realty Co. of Jacksonville to construct shops, de pots, four steel bridges and docks.

Md., Baltimore.—Pennsylvania Terminal Railway Co. contemplates but has not defi nitely arranged for erection of roundhouse and shops on Falls Rd., near 26th St., recently noted; shops for use of Maryland & Penn sylvania Railroad Co.; structure to consist of 17 stalls, each 14 wide in front, 28 in rear, and 70 feet deep; masonry walls; timber roof; probably slag for main roofing, with slate for monitor; G. E. Norris, engineer, North Ave. and Oak St.

Md., Hagerstown.—Cumberland Valley Rail road, M. C. Kennedy, general superintendent, Chambersburg, Pa., will, it is reported, expend \$500,000 in improvements, including depot, roundhouse and elevated tracks.

Tex., Wichita Falls.—Wichita Falls & Northwestern Railway, R. A. Thompson, chief engineer, is reported as to erect shops to cost \$200,000.

Va., Cape Charles.—New York, Philadel phia & Norfolk Railroad, Elisha Lee, super intendent, awarded contract to John W. Ferguson, Paterson, N. J., for erection of proposed locomotive repair shops; power plant 70x74.9 feet; smith shop, 50.6x39.9 1/2 feet; oilhouse, 22.6x53.3 feet; machine shop, 70.6x102 feet; erection shop, 70.6x153 feet; 75-

stall roundhouse, 65 feet wide; fireproof con struction; cost \$125,000.

ROAD AND STREET IMPROVE- MENTS

Ala., Attalla.—City will open bids March 21 for construction of combination cement side walks, curb and gutter to cost about \$100,000. Address The Mayor. (Recently mentioned.)

Ala., Dothan.—City will construct 210,000 square feet sidewalks and 36,000 linear feet curb and gutters; bids to be opened March 21. Joseph Baker, Mayor. (See "Machinery Wanted.")

Ala., Dothan.—City awarded contract to Graves-Matthews Paving Co., Birmingham, Ala., for nine blocks of vitrified-brick pav ing; estimated cost, \$50,000; Joe Baker, Mayor. (Recently mentioned.)

Ark., Marianna.—City has requested W. R. Petty, contractor, Pine Bluff, Ark., to esti mate cost of paving about four blocks on West Main St., from Church St. to railroad, with vitrified brick.

Ala., Montgomery.—Montgomery County will regrade 12 miles of Woodley and Mount Meigs roads and grade and gravel 2 miles of road; bids to be opened March 21; J. T. Bullen, County Engineer. (See "Machinery Wanted.")

Fla., Arcadia.—De Soto County Commis sioners have withdrawn until next August recently noted bond issue of \$500,000 for road construction.

Fla., Jacksonville.—City awarded contract to Fred Ogram of Jacksonville for grading and laying about 1120 linear feet of black hexagonal tile sidewalk, 3 feet 10 inches wide, with concrete curbing; contract price, 73 cents per square yard for sidewalk and five cents per linear foot for curbing.

Fla., Palatka.—Putnam County has let con tract to Mr. Emerson for six miles of hard surface road; has bids on two 12-mile and one four-mile contracts. (H. D. Atkinson, Atlanta, Ga., recently noted to have contract for 10 miles of hard-surface road.)

Fla., Pensacola.—City awarded contract to W. W. Hatch & Sons, Goshen, Ind., for con struction of 635,000 square feet of concrete sidewalk at 9.49 cents per square foot; L. E. Thornton, City Engineer. (Recently noted.)

Ga., Clarksville.—City will macadamize Washington St. and construct brick or concrete sidewalks; engineer not yet engaged; J. H. Hicks, Mayor.

Ga., Columbus.—City will macadamize 25,000 square yards of pavement on Hamilton Ave.; no contracts.

Ga., Dalton.—City will vote on issuance of \$25,000 of bonds for street paving. Ad dress The Mayor. (Recently mentioned.)

Ga., Elberton.—City will pave Oliver St. from Elbert St. and College Ave. to railroad crossing with vitrified brick; will also lay concrete sidewalks. Address The Mayor.

Ga., Waycross.—City will pave Carswell and Albany Aves. with vitrified brick. Ad dress The Mayor.

La., Houma.—City will construct one mile of concrete sidewalks; bids will be invited. Address The Mayor.

La., Lake Charles.—City will open bids March 28 for construction of seven miles of cement sidewalk and curb; C. H. Burton, City Engineer. (See "Machinery Wanted.")

La., Lake Charles.—City will open bids March 28 on sidewalks recently noted; seven miles of sidewalk and curb contemplated; plans and specifications by C. H. Burton, City Engineer, who will furnish same on re quest. (See "Machinery Wanted.")

Md., Baltimore.—Bill has been introduced in Legislature authorizing city to submit to vote issuance of \$1,000,000 of bonds for construction of Jones' Falls boulevard. Francis K. Carey of Carey, Piper & Hall, 609-619 Calvert Bldg., is chairman of com mittee on city plan.

Miss., Richton.—Board of Aldermen au thorized Street Commissioner to pave 1000 feet of sidewalk on Front St. with concrete. Address The Mayor.

Miss., Starkville.—Starkville Municipal Board, Oktibbeha County Supervisors and Agricultural and Mechanical College are con sidering construction of road and concrete walks from courthouse in Starkville to col lege chapel; distance about 1 1/2 miles; road will probably be of crushed stone and cheri; cost \$6000; H. A. Beattie, Mayor.

Md., Westernport.—Western Maryland Rail way, H. R. Pratt, chief engineer, Hillen Station, Baltimore, Md., will, it is reported, erect addition to machine shops, install bin for coaling locomotives and add 15 stalls to roundhouse.

N. C., Raleigh.—Wake County will grade

and macadamize Willardsville road; bids to be opened April 4; F. W. Allen, chairman Board County Commissioners. (See "Machinery Wanted.")

N. C., Winston-Salem.—Forsythe County Road Supervisors ordered construction of macadam road on Clemmonsville road.

Okla., Oklahoma City.—City awarded contracts for street paving to Western Paving Co. at \$252,981.57, Barber Asphalt Paving Co. at \$91,305.68, and Cleveland-Trinidad Paving Co. at \$27,930.96; all of Oklahoma City.

Okla., Shawnee.—City is considering election to vote on issuance of \$200,000 of bonds for construction of boulevard around city. Address The Mayor.

S. C., Anderson.—Anderson Traction Co., W. J. Thackston, president, will lay cement crossties beneath rails in business section; brick paving will be laid over ties; estimated cost \$2100.

S. C., Landrum.—City will improve sidewalks. Address The Mayor.

Tenn., Athens.—McMinn county awarded contract to John L. Conner, Knoxville, Tenn., to construct 15 miles of road.

Tenn., Lonsdale, R. Station, Knoxville.—City Council authorized \$30,000 bond issue for street and school improvements; M. M. Copenhaver, Mayor.

Tex., Cleburne.—City awarded contract to Sherwood & Wagley of Cleburne to lay 2000 square feet of cement sidewalk on North Anglin St.

Tex., Shu City (not a postoffice).—Shu City Land Co., Room 6, Krupp & Tuffy Bldg., Houston, Tex., awarded contract to W. S. Delery, Houston, for 27 miles grading. (See "Land Developments.")

Tex., Orange.—Orange County Commissioners awarded contract to G. W. Price, Beaumont, Tex., at \$1398 to construct five-foot concrete sidewalk and street curbing surrounding Courthouse square. (Recently mentioned.)

Tex., Taylor.—Precincts Nos. 6 and 7 of Williamson county will vote March 22 on issuance of \$200,000 of bonds for macadamizing of about 100 miles of roads. Address County Commissioners, Georgetown, Tex.

Tex., El Paso.—City Council authorized paving of Myrtle Ave. and Overland St. Address The Mayor.

Tex., Waco.—City awarded contract to Ockander Bros. of Waco to lay 15 blocks of vitrified-brick pavement at \$1.72 per square yard for brick laid flat, with bituminous filler to deaden sound, and \$2.05 for brick laid edgewise, with cement filler; total cost about \$50,000.

Va., Abingdon.—Washington county will vote on issuance of \$300,000 of bonds for road construction. Address County Commissioners.

Va., Chatham.—City will vote on \$7000 bond issue for streets; date of election not settled. J. H. Hargrave, Jr., Mayor.

Va., Colonial Beach.—City voted \$10,000 bond issue for street improvements, etc. Address The Mayor.

Va., Lynchburg.—City will improve Main St., between Walnut and Buena Vista Sts.; bids opened March 17; H. L. Shaner, City Engineer.

Va., Lynchburg.—City awarded contract to James R. Ford, 1609 Filmore St., Lynchburg, at \$33,335 to pave portions of 9th, Commerce and 8th Sts.; granite block and curb, and granite walks; H. L. Shaw, City Engineer. (Recently noted.)

Va., Manchester.—City will construct 8000 square yards concrete sidewalks, including necessary curbing; bids to be opened March 18; D. F. Laprade, City Engineer. (See "Machinery Wanted.")

Va., Spottsylvania.—J. Mason, County Judge, appointed Dr. W. A. Harris, George W. Perry and others as commissioners in charge of road improvements; \$100,000 available.

W. Va., Huntington.—City will vote May 3 on issuance of \$300,000 of bonds for street improvements. Address The Mayor. (Recently mentioned.)

W. Va., Parkersburg.—City will pave Avery St., from 13th to 17th St.; bids to be opened March 24. Frank Good, Auditor. (See "Machinery Wanted.")

W. Va., Princeton.—City contemplates paving or macadamizing streets. Address The Mayor.

SEWER CONSTRUCTION

Ala., Phenix City, P. O. Columbus, Ga.—City will lay 600 feet of sewer pipe across street at foot of Summerville hill and fill in street; Wiley Rusk, chairman street committee.

Ark., Pine Bluff.—City awarded contract to

Robinson Bros. of Pine Bluff for extension of sewers in district No. 8; sewers are to be constructed on Mulberry St. and Eighteenth, Nineteenth and Twentieth Aves.

D. C., Washington.—Bids will be opened March 28 for construction of sewers. Cuno H. Rudolph and others, Commissioners District of Columbia. (See "Machinery Wanted.")

Fla., Kissimmee.—City voted issuance of \$43,000 of sewer and water-works bonds. Address \$43,000 of sewer and water-works bonds; Xavier A. Kramer, engineer, Magnolia, Miss. (Recently mentioned.)

Ga., Dalton.—City will vote on issuance of \$20,000 of bonds for extension of sewer system. Address The Mayor.

Mo., Springfield.—City Engineer, H. G. Horton, is preparing plans and specifications for four sewer districts.

Okla., Oklahoma City.—City has retained F. H. Lancashire, Dallas, Tex., to design sewage purification works for North District sewer outlet; estimated cost \$25,000; bids to be opened March 28; bids will also be opened on same date for construction of lateral sewer in Riley's Meadow Garden Addition. Bob Parman, City Clerk. (See "Machinery Wanted.")

Okla., Tulsa.—City voted issuance of \$35,000 of bonds for extension of sanitary sewer mains and submains and storm sewers; John O. Mitchell, Mayor. (Recently mentioned.)

S. C., Columbia.—Granby Cotton Mills is having plans prepared for sewer system in mill village; about 7000 feet sewerage; construction probably mainly by company.

S. C., Charleston.—P. D. Hay of Charleston has contract at about \$29,000 for additional drain work at Charleston navy-yard.

S. C., Florence.—City awarded contract to Johnson-Matthews Construction Co. of Florence, at \$69,000, for construction of sanitary sewer system; 19 miles of pipe sewers from 8 to 18 inches diameter and disposal plant, complete. S. Jaudon, Box 582, Savannah, Ga., is engineer. (Recently mentioned.)

Tenn., Columbia.—City Council is considering construction of Helm's Branch sanitary sewer, estimated to cost \$10,000. Address The Mayor.

Tenn., Morristown.—City has engaged Charles E. Collin, Philadelphia, Pa., as engineer for sewer system; surveys now being made. Bond issue of \$40,000 recently reported voted.)

TELEPHONE SYSTEMS

Ark., Heber.—North Arkansas Telephone Co. will construct line from Heber to Lealie, Ark.

Ark., Fort Smith.—Southern Bell Telephone & Telegraph Co., main office, Atlanta, Ga., will, it is reported, construct two metallic copper circuits to connect Fort Smith, Ozark, Rogers, Bentonville, Eureka Springs and other Arkansas towns, lines to be continued to Sullington, Mo., there to be connected with Missouri and Kansas lines; cost \$75,000 to \$100,000.

Ga., Atlanta.—Edgingham Telephone & Telegraph Co. incorporated with \$5000 capital stock by Sydney O. Newsome of Guyton, Ga.; C. F. Berry, J. B. Simmons, both of Springfield, Ga., and others.

Ga., Dalton.—Mill Creek Telephone Co. incorporated with \$5000 capital stock by N. C. Kennemer, J. A. Griffin, C. A. Griffin and others.

Ga., Savannah.—Southern Bell Telephone & Telegraph Co., Atlanta, Ga., is considering erection of telephone building.

Miss., Philadelphia.—Independent Telephone Co. will rebuild telephone exchange reported burned; loss \$5000.

N. C., Asheville.—Southern Bell Telephone & Telegraph Co., Atlanta, Ga., will construct toll line between Asheville and Murphy, N. C.; No. 12 copper circuit.

N. C., North Wilkesboro.—Straw Telephone Co. organized with A. G. Hendren, president; L. B. Miller, vice-president; W. J. Templeton, secretary-treasurer; will construct telephone line from North Wilkesboro via Wilkesboro, Straw, etc., to Somer.

N. C., Salisbury.—Independent Telephone Co. incorporated with \$50,000 capital stock by W. M. Barringer, Statesville, N. C.; J. F. Heydon, High Point, N. C., and others.

N. C., Salisbury.—Independent Telephone Co. incorporated with \$50,000 capital stock by Iredell Telephone Co., Lexington Telephone Co. and Concord Telephone Co.

Okla., Hydro.—Southern Mutual Telephone Co. incorporated by A. F. Kee, G. E. Oliver and Will Millhollen.

Okla., Shawnee.—Shawnee Home Telephone Co. incorporated with \$5000 capital stock by W. S. Kisor, Frank J. Austin, E. S. Pine and others.

S. C., Cartersville.—Cartersville Telephone Co. incorporated by Charles T. Haynie, W. T. Harlee, J. H. Thompson and others.

Tenn., Hornbeak.—Hornbeak Telephone Co. incorporated by S. M. Fields, W. C. Wingo, A. O. Carum and others.

W. Va., Holliday's Cove.—Turkey Telephone Co. incorporated with \$5000 capital stock by Walden Morrow, Jesse Morrow, F. G. Watson and others.

W. Va., Wellsburg.—Wellsburg Home Telephone Co. increased capital stock from \$50,000 to \$75,000.

TEXTILE MILLS

Ga., Columbus.—Cotton Cloth.—J. T. Broadbent of Brooklyn, N. Y., is reported as planning erection of cotton-cloth mill.

Ga., Villa Rica.—Knit Goods.—J. T. Fuller and associates will, it is reported, build knitting mill.

N. C., Salisbury.—Cotton Yarns.—Vance Cotton Mills contemplates building addition lately reported and installation of twisting spindles; now has 10,000 spindles.

S. C., Columbia.—Cotton Twine, etc.—Glencoe Cotton Mill has plans for buildings and will award contract by April 1; install 5000 spindles to manufacture twines and warp; require 225 electrical horse-power; buildings and machinery to cost \$115,000; engineers in charge, Shand & LaFaye; George M. Berry, vice-president. (Recently reported organized, etc.)

S. C., Jonesville.—Hosiery.—Palmetto Hosiery Co. incorporated with \$75,000 capital stock; will install 100 knitters, 20 loopers, 20 ribbers, etc.; 12x36 Corliss steam engine for power; J. J. Littlejohn, president.

S. C., Landrum.—Hosiery.—Blue Ridge Hosiery Mill will build addition to double capacity; now has 112 knitting machines, steam power equipment, etc.

WATER-WORKS

Ala., Lafayette.—City voted bond issue for water-works. Address The Mayor.

Ala., Opelika.—City, L. F. Dickson, Mayor, has engaged J. B. McCrary, Atlanta, Ga., to prepare plans for water-works construction; bids will be received until April 15 for furnishing city with water and electric lights; if bids are unsatisfactory, service will be supplied by city; recently noted to vote March 28 on \$85,000 bond issue for water-works and electric-light plant. (See "Machinery Wanted.")

Fla., Kissimmee.—City voted issuance of \$43,000 water-works and sewer construction bonds; Xavier A. Kramer, engineer, Magnolia, Miss. (Recently mentioned.)

Ga., Atlanta.—Committee on Improvement of water-works adopted resolution calling for laying 43 miles of piping, of which 30 miles will be new and 13 miles replaced by larger mains and relaid in residence sections; R. M. Clayton, City Engineer. (City recently mentioned as having voted \$900,000 bond issue for water-works improvements, including \$725,000 for piping.)

Ga., Dalton.—City will vote on issuance of \$30,000 of bonds for extension and improvement of water-works system. Address The Mayor. (Recently mentioned.)

Ga., Donaldsonville.—City will vote on bond issue for water-works and electric-light plant estimated to cost \$25,000. Address The Mayor.

Ga., Wrightsville.—City is having plans prepared by Arthur Pew, Atlanta, Ga., for water-works recently noted; cost \$25,000; daily capacity about 100,000 gallons; will erect brick addition to electric-plant building; date of opening bids not set.

Ky., Clifton, P. O. Newport.—Hill & Co., engineers, First National Bank Bldg., Cincinnati, O., may be addressed for information relative to construction of water-works; cost, \$12,000; construction to include mains, fire-plugs, standpipe, etc.; water to be supplied from Newport. (Bond issue recently noted.)

La., Houma.—Board of Aldermen authorized Calvin Wurzelow, Mayor, to invite bids on pump to be installed in power-house, which will increase efficiency of water-works and make it duplicate system throughout.

Md., Baltimore.—Baltimore County Water & Electric Co., Fred W. Feldner, president, 411 East Baltimore St., has contract to lay pipe lines throughout Ten Hills, suburban development.

Md., Ellicott City.—City petitioned Legislature for authority to issue \$30,000 of bonds for construction of water-works. Address The Mayor.

Miss., Benoit.—City will construct water-works; bids to be opened April 5. M. M.

Thompson, Mayor. (See "Machinery Wanted.")

Miss., Brookhaven.—City Council contemplates construction of 1,000,000-gallon water tank at municipal light and water plant. Address The Mayor.

Miss., Vicksburg.—City awarded contract to Southern Paving & Construction Co., Chattanooga, Tenn., to lay water mains on Cherry, Harris, Drummond and Walnut Sts.; cost about \$20,000.

N. C., East Spencer, P. O. Spencer.—City will vote April 12 on issuance of \$25,000 of bonds for water-works system, etc. Address The Mayor.

Okla., Fort Still.—E. R. Kerby, Lawton, Okla., is lowest bidder on construction of water-works.

Okla., Henryetta.—City postponed date of opening bids from March 15, as lately stated, to March 22 for construction of earth dam 35 feet high, installation of two 500-gallon power pumps, 2 gas engines, etc., in connection with construction of water-works. Granbery Jackson, Nashville, Tenn., is consulting engineer; W. E. Harlan, resident engineer.

Okla., Medford.—City voted issuance of \$12,000 of bonds for extension of water-works. Address The Mayor.

Okla., Pittsburg.—Pittsburg Water & Light Co. incorporated to construct water-works and electric-light plant.

Okla., Tulsa.—City voted issuance of \$100,000 of bonds for improving, extending and maintaining water-works system; B. H. Sands, superintendent. (Recently mentioned.)

Tenn., Lonsdale, R. Station, Knoxville.—City Council directed water committee to ascertain cost of installing public water plant; M. M. Copenhaver, Mayor.

Tex., Brady.—Brady Water & Light Co. awarded contract for erection of 200,000-gallon standpipe.

Tex., Brownsville.—City voted issuance of \$15,000 of bonds to improve water-works. Address The Mayor. (Recently mentioned.)

Tex., Childress.—City has engaged John B. Hawley, Fort Worth, Tex., as engineer for water-works improvements, including pumping station at Lake Childress and laying 10,000 feet of eight-inch water piping; estimated cost \$12,500. (Recently mentioned.)

Tex., Crowell.—Crowell Water Supply Co. (recently reported incorporated) will construct gravity-system water supply; probable cost \$25,000; date of opening bids not fixed; J. L. Strickland, president; M. F. Crowell, manager. (See "Machinery, etc., Wanted.")

Tex., Dallas.—City awarded contract at \$23,070 to Fred A. Jones Company of Dallas to construct dam, spillway and foundations for pumping station at White Rock reservoir site. (Full particulars mentioned in January.)

Tex., Greenville.—City awarded contract to C. L. Witherspoon, Corsicana, Tex., at \$11,000 for drilling deep well at water-works plant. (City recently mentioned to vote on \$20,000 bond issue for improvement of water-works.)

Tex., Lake Cliff (not a postoffice).—Chas. A. Mongold and associates retained F. H. Lancashire, Dallas, Tex., to do preliminary work and prepare plans for construction of dam, core wall and spillway.

Tex., Nocona.—City will vote in April on issuance of \$25,000 of bonds for construction of water-works. Address The Mayor.

Tex., Pearsall.—Pearsall Water, Ice & Light Co. incorporated by George F. Hines and others. (See "Ice and Cold-Storage Plants.")

Tex., Fort Crockett.—Kelso & Vautrin, Galveston, Tex., lowest bidders at \$5900 for construction of water-distribution system; bids were based on following approximate quantities of material in place: Two hundred feet four-inch cast-iron pipe; 600 feet six-inch cast-iron pipe; 250 feet eight-inch cast-iron pipe; 1070 feet one-inch to two-inch galvanized-iron pipe; 16 fire hydrants; three park hydrants; one crane; Capt. P. Whitworth, constructing quartermaster. (Recently mentioned.)

Tex., Rice.—Westmoreland Supply Co., 1005 Scanlon Bldg., Houston, Tex., contemplates installation of 10,000-gallon water plant from flowing four-inch well, pneumatic tank and two miles four-inch and smaller pipe.

Tex., Sherman.—City will open bids April 4 for improvement and extension of water-works; cost \$12,000; P. C. Thurmond, City Engineer; Barney C. Kresger, City Secretary; bond issue noted in December. (See "Machinery Wanted.")

Va., Holland.—City is considering construction of water-works. Address The Mayor.

WOODWORKING PLANTS

Ark., Malvern.—Chaira.—Purdy-Cooper Chair Co. incorporated with \$100,000 capital stock by C. H. Purdy, W. W. Beaty, J. H. Reaves and others.

Ark., Texarkana.—Texarkana Chair Co. will establish plant to manufacture chairs, lawn swings, etc.; will erect fireproof building; W. W. Campbell, president; J. T. Murphy, manager. (J. T. Murphy and Ralph Moore recently noted interested.)

Ga., Cave Spring.—Sash, Doors, etc.—Cave Spring Planing Mill incorporated with \$10,000 capital stock to conduct sash, door and screen factory; Frank Wright, president; Mrs. Frank Wright, secretary; C. W. Daniel, superintendent. (See "Machinery Wanted.")

Ga., Dalton.—Spokes.—N. C. Blanchard Company, S. C. Blanchard, president, Spring City, Tenn., purchased machinery for branch factory recently noted; daily capacity 6000 spokes.

Ga., Rome.—Wire-bound Boxes.—Wire Box & Crate Co. incorporated with \$60,000 capital stock by J. Shellenberger, G. H. Miller, J. C. Miller and C. S. Sparks; has patent on wire-bound box invented by Mr. Shellenberger; will, it is reported, probably rebuild burned plant of C. L. King Manufacturing Co.

Ky., Lexington.—Furniture.—Roper Furniture Co., Mishawaka, Ind., contemplates establishment of furniture factory.

Ky., Lexington.—Furniture.—Moore Manufacturing Co., Springfield, Mo., contemplates establishment of plant to manufacture church and school furniture, office fittings, etc.

Ky., Lexington.—Woodworking.—Washington Manufacturing Co., Washington, Ga., considers purchasing woodworking plant and establishment of branch factory.

Ky., Louisville.—Rims, Shafts, etc.—Price Hudson, New Orleans, La., purchased plant and holdings of Kentucky Rim & Shaft Co.; future plans not decided.

La., Alexandria.—Wood Pipe.—A. Wyckoff & Son Co. of Louisiana has ordered machinery to double capacity of plant for manufacturing steel-banded wood water-pipes and wood steam-pipe casing; daily output is 1200 feet of pipe and is operating day and night; branch of A. Wyckoff & Son Co., Elmir, N. Y. C. C. Crew, manager at Alexandria.

La., Robeline.—Staves.—Newport Stave Co., Eldorado, Ark., will erect building and equip for manufacturing staves.

Mo., St. Louis.—Novelities.—Oak Manufacturing Co. incorporated with \$10,000 capital stock by H. B. Ash, A. S. Smith and Albert B. Hausman.

N. C., Durham.—Furniture, Doors, Sashes, etc.—Whitted Woodwork Manufacturing Co., recently reported incorporated with W. G. Pearson, president, will expend \$2000 to erect building; two stories; 50x80 feet; construction by owner; will install light machinery to manufacture mission furniture, doors, sashes, etc. (See "Machinery Wanted.")

N. C., Henderson.—Buggies.—Corbett Buggy Co., R. J. Corbett, manager, will rebuild plant recently noted burned; plans not decided.

N. C., Liberty.—Picker Sticks, etc.—Liberty Picker Stick & Novelty Co. incorporated with \$25,000 capital stock by C. B. Curtis, J. A. Martin and others; manufacture picker sticks, bobbins, skewers, etc.

N. C., Oxford.—Buggies.—Taylor-Cannady Buggy Co. will erect three-story addition to plant; floor space 35,000 feet; will convert warehouse into manufacturing building and join to addition and increase capacity from 4000 to 7500 buggies annually.

S. C., Lamar.—Furniture.—Carolina Furniture Co. incorporated with \$2500 capital stock by A. M. Reynolds, W. W. Davis and L. S. Lawhon.

Tex., Beaumont.—Stair and Fixtures.—Beaumont Stair & Fixture Co. organized with \$15,000 capital stock; J. C. Christopher, president and general manager; P. C. Johnson, general foreman.

Tex., Brady.—Sash and Doors.—Lee Morgan will soon begin erection of proposed sash and door factory; machinery purchased.

Tex., Center.—Handles.—J. E. Rausbeck will establish handle factory.

W. Va., Gassaway.—Martin H. Snider, Hickox Bldg., Cleveland, O., may be addressed for information relative to stove factory recently noted to be erected by Elk & Little Kanawha River Railroad Co.

BURNED

Ark., Van Buren.—St. Louis, Iron Mountain & Southern Railway's coal docks, including holsting plant, water tank, water-purifying

plant, etc.; estimated loss, \$18,000; M. L. Byers, chief engineer, St. Louis, Mo.

La., Noble.—Frost-Johnson Lumber Co.'s planing mill.

Md., Baltimore.—W. L. Jackson & Co.'s carriage and toy store at 1430 to 1426 West Baltimore St.; loss on building, owned by W. T. Haslup & Co., \$10,000.

Md., Cumberland.—City hall, containing municipal offices, Academy of Music, market-house, etc.; estimated loss \$150,000. Address The Mayor.

Md., Hagerstown.—Roller skating rink, owned by George F. Bender; loss \$10,000.

Md., Hyattsville.—Hyattsville Laundry; building owned by William P. Magruder.

Miss., Winona.—Winona Steam Laundry, owned by A. M. Harris.

Miss., Philadelphia.—Independent Telephone Co.'s exchange; loss \$5000.

Mo., Fulton.—Fulton Daily Leader newspaper plant; loss \$6500.

Mo., St. Louis.—Lead Products Co.'s plant; loss \$125,000.

Mo., St. Louis.—Western Planing Mill Co.'s plant at 2336 Pope Ave.; loss \$33,500.

N. C., Henderson.—Henderson Manufacturing Co. states its plant was not affected by fire; recently incorrectly reported.

N. C., Henderson.—Carolina Bagging Co. states that its plant was not destroyed by fire; recently incorrectly reported.

N. C., Woodlawn.—Piedmont High School main building; loss \$9000.

Okla., Fairview.—Kansas City, Mexico & Orient Railroad's car-repair shops; loss \$100,000; W. W. Colpitts, Kansas City, Mo., chief engineer.

Okla., Woodward.—Central School building. Address The Mayor.

Tenn., Lillards Mills.—Sawmill and lumber plant owned by W. A. Sharp & Son of Lewisburg, Tenn.; loss \$1000.

Tenn., Middleton.—Hotel Glover; loss about \$6000.

Tenn., Woodbury.—Two livery barns and four business buildings owned by A. B. Kirk, loss \$8000; hotel and sample room owned by Mason & Higgins, loss \$6000.

Tenn., Knoxville.—Knox County Industrial School; loss \$5000.

Tex., Bryan.—Bryan Steam Laundry, owned by W. O. Hearne; loss \$7500.

Tex., Dallas.—Dallas Waste Mills, owned by M. H. Thomas; loss \$85,000.

Tex., Temple.—Findheisen-Dauwalter Company's store; loss on building, owned by Mrs. M. G. Reilly, \$4000.

Tex., Gainesville.—Gainesville Canning Co.'s plant; loss \$3000.

Tex., Marshall.—Marshall Compress Co.'s plant; loss \$40,000.

Tex., Whitesboro.—S. T. Fitch's gin and ice plant; loss \$12,000.

Va., Abingdon.—Feed stable owned by New Washington Brick Co., 1420 New York Ave. N. W., Washington, D. C.

Va., Planners Point.—Southern Railway's office building, loss \$25,000; W. H. Wells, chief engineer construction, Washington, D. C.

W. Va., Bluefield.—White Kitchen, in Lucas Bldg.; loss \$10,000.

W. Va., Bluefield.—Bluefield Evening Leader's plant; loss \$6000.

W. Va., Charleston.—American Steam French Dry Cleaning & Dyeing Co.'s plant at 116-118 Summers St.; loss \$7000.

BUILDING NEWS

BUILDINGS PROPOSED

APARTMENT-HOUSES

Ark., Helena.—Business Men's League of Helena, S. B. Straub, chairman of building committee, has plans by Utley & Utley, Helena, for three-story brick and stucco apartment-house recently noted; to contain 108 rooms; cost \$25,000.

Ark., Helena.—Apartment-house Company will erect apartment-house at Perry and Pecan Sts.; 18 apartments; cost \$25,000.

Fla., Tampa.—Mrs. J. Fitzgerald will erect apartment-house on Jefferson St., Tampa Heights; estimated cost, \$5000.

Ky., Newport.—Thomas Weston has plans by L. H. Wilson, 10 West 4th St., Newport, for apartment-house; 2½ stories; 44x60 feet; brick and stone; cost \$3000.

Md., Baltimore.—W. S. Dubel, 1203 West Franklin St., is having plans prepared by John Freund, Jr., 210 East Lexington St., Baltimore, for remodeling three-story-and-basement brick building at Arlington Ave.

and Lanvale St. into apartment-house; three bathrooms and kitchen to be added; repapering and decorating; tile work and painting; new gas and electric lighting fixtures; now receiving bids.

Md., Baltimore.—G. Froelich has plans by Louis Levi, 610 American Bldg., for three-story brick apartment and store building at North and Linden Aves., and following contractors are invited to bid: Charles L. Stockhausen, National Marine Bank Bldg.; George Buennicke & Sons, 305 St. Paul St.; Thomas B. Stanfield & Son, 109-111 Clay St.; R. B. Mason, 324 West Biddle St.; John K. McIver, 309 Wilson Bldg., and Monmonier & Sorrell, 1711 McCulloh St., all of Baltimore.

Mo., Kansas City.—Jacob Schweizer purchased site 90x50 feet on which to erect two six-apartment buildings.

Mo., Kansas City.—Joseph V. Straub, 2320 Harrison St., purchased site 140x100 feet at 23d St. and Troost Ave.; will erect two apartments and store buildings on Troost Ave. frontage and three four-apartment flats on 23d St.

Tex., El Paso.—M. B. Davis will erect apartment-house to cost about \$40,000.

Tex., El Paso.—Theodore Eggers will erect apartment-house to cost about \$40,000.

W. Va., Clarksburg.—W. B. McCarty is having plans prepared by Holmboe & Lafferty, Empire Bank Bldg., Clarksburg, for apartment and store building; three stories and basement; 50x100 feet; brick, with stone trimmings; cost \$60,000.

W. Va., Martinsburg.—W. L. Jones will erect three-story brick store and apartment building; concrete foundation being laid; C. D. Burns of Martinsburg is superintendent in charge.

BANK AND OFFICE BUILDINGS

Ala., Gadsden.—Etowah Bank & Savings Co. will erect building on site recently noted purchased at Broad and 3d Sts.; probably reinforced construction; cost \$40,000; steam heat; electric lighting; electric elevator; plans being prepared by C. E. Bearden, Chattanooga, Tenn.; J. Wadsworth of Birmingham, Ala., with C. S. Ward and S. S. Caldwell, Gadsden, promoters. (See "Machinery Wanted.")

Fla., Tarpon Springs.—Sponge Exchange Bank has plans by Bonniwell & Son, St. Petersburg, Fla., for bank and office building; two stories; 25x100 feet; brick; concrete trimmings; cost \$10,000.

Ga., Macon.—Georgia Life Insurance Co. accepted plans by Norman, Hentz & Reid, 304 American National Bank Bldg., Macon, for office building; 10 stories; fireproof; front of marble; three elevators; estimated cost \$250,000. (Recently mentioned.)

Ga., Macon.—Commercial National Bank purchased bank and office building it now occupies at 2d St. and Cotton Ave. for \$36,500 and contemplates erection of two additional stories and various other improvements.

Ky., Harlan.—People's Bank of Harlan, W. H. H. Smith, president, contemplates erection of building in late summer or fall.

Ky., Munfordville.—Hart County Deposit Bank & Trust Co., J. R. Highball, president, reported to erect office building.

Ky., Paducah.—First National Bank will open bids April 4 for erection of proposed bank building at 3d St. and Broadway; stone; ceiling 43 feet high; marble wainscoting; cost \$40,000; plans by W. L. Brainard of Paducah.

Md., Baltimore.—American Agricultural Chemical Co., Equitable Bldg., purchased site 23x30 feet at South and Water Sts. for \$18,000, on which to erect office building.

Miss., Georgetown.—Georgetown Bank will erect bank building.

Mo., Kansas City.—Albert Marty decided to erect office building at 9th St. and Grand Ave. to replace burned Rialto Bldg.; 96x115 feet; 13 stories; brick or terra-cotta; estimated cost \$700,000.

Okla., Sapulpa.—Edward Brin, Terrell, Tex., will expend \$25,000 to erect office building recently noted; 50x125 feet; mill construction; plans by T. W. Myall & Co., Sapulpa. Address architects.

S. C., Gaffney.—J. H. Curry will erect office and store building; two stories; brick.

Tenn., Henning.—Bank of Henning (Hal Kirkpatrick, Ripley, Tenn., and others) contemplates erecting bank building.

Tenn., Union City.—Union National Bank, Walter Howell, cashier, will remodel and refurbish present structure. (See "Machinery Wanted.")

Tex., El Paso.—H. J. Fewel contemplates erection of either four-story or eight-story office building.

Tex., Falfurrias.—Falfurrias State Bank, Richard G. Miller, president, will have plans prepared by J. B. Leffer, Victoria, Tex., for bank and office building.

Tex., Houston.—Southern Pacific Company, Thornwell Fay, general manager, plans construction of office building; nine stories and basement; 145x175 feet; steel frame; fireproof construction; other details not determined.

Tex., Marshall.—Marshall National Bank, W. L. Martin, cashier, will erect bank building; two stories; estimated cost \$40,000.

Tex., Wichita Falls.—Kemp & Kell have plans by Hubbell & Greene, Dallas, Tex., for bank and office building; 5 stories and basement; concrete and steel; fireproof; City National Bank will occupy first floor; 100 offices on upper floors; cost \$125,000.

Va., Cape Charles.—L. E. Mumford Banking Co., L. E. Mumford, president, will erect bank building and install vault. (See "Machinery Wanted.")

Va., Hare Valley (not a postoffice).—Brick-house Banking Co., R. F. D. Route No. 1, Exmore, Va., has plans by Walter Corbin, 749 Church St., Norfolk, Va., for 23x45-foot fireproof bank building; asks bids on construction; will open bids April 1; address Melvin J. Chisum, R. F. D. Route No. 1, Exmore, Va.

W. Va., Blair, P. O. Martinsburg.—Blair Limestone Co., J. K. McLanahan, president, Hollidaysburg, Pa., has plans by Woltz & Porter, Waynesboro, Pa., for office building; two stories; 56x30 feet; brick; apartments on second floor.

W. Va., Princeton.—Princeton Banking Co. has plans by A. F. Wyson, Princeton, for building recently noted; 66x85 feet; four stories; cost \$50,000.

W. Va., Grafton.—Taylor County Bank purchased site on which to erect bank and office building; four or five stories; about 35x70 feet; stone and brick; elevator.

CHURCHES

Ala., Cullman.—First Baptist Church, Rev. M. L. Harris, pastor, has not selected architect to prepare plans for edifice recently noted; fireproof construction; steam heat; cost within \$12,000; plans undecided. (See "Machinery Wanted.")

Ala., Montgomery.—Forest Avenue Methodist Church, Rev. J. W. Frazer, pastor, Forest Ave. and Vine St., Highland Park, has begun erection of proposed edifice; pressed brick; stone trimmings; will consist of two rooms, main auditorium with seating capacity of 400 and Sunday-school room with seating capacity of 200.

Ala., Woodlawn.—St. Clements' Mission Paris, Rev. Father Bratton in charge, contemplates erecting edifice.

D. C., Washington.—National Building Committee, M. E. Church South, will meet in Washington March 18 to make further plans for erection of monumental edifice mentioned recently and in January; estimated cost, \$250,000; Geo. S. Sexton, assistant corresponding secretary, 707 West Chestnut St., Louisville, Ky.

D. C., Washington.—United Presbyterian congregation plans erection of edifice at Georgia and New Hampshire Aves. Address The Pastor, United Presbyterian Church.

Md., Baltimore.—St. Andrew's Protestant Episcopal Church, Preston and Chester Sts., has preliminary plans by Howard Sill, 11 East Pleasant St., Baltimore, for enlarging and remodeling edifice; addition of 40 feet on Chester St.; estimated cost, \$15,000.

Md., Salisbury.—Wicomico Presbyterian congregation will expend about \$900 in improvements to edifice, including heating and lighting apparatus. Address The Pastor.

Miss., Meridian.—East End Methodist congregation contemplates erecting edifice; pressed brick and stone; cost \$25,000. Rev. G. S. Harmon, Pastor.

N. C., Reidsville.—Haw River Methodist Protestant Circuit, Rev. C. E. M. Rapre, pastor of various congregations comprising circuit, contemplates erection of edifice.

N. C., Spring Hope.—Protestant Episcopal Church contemplates erection of edifice. Address The Pastor.

Okla., Oklahoma City.—Tabernacle Baptist Church will expend \$10,000 to remodel and enlarge edifice recently noted; 50x70 feet; ordinary brick construction.

S. C., Anderson.—St. Joseph's Catholic Church has plans by Joseph H. Casey of Anderson for remodeling edifice; cost \$3500.

S. C., Seneca.—Presbyterian congregation is considering erection of edifice. Address The Pastor, Presbyterian Church.

Tenn., Arlington.—Presbyterian Church has plans by John Gaisford, 309 Royal Bldg., Memphis, Tenn., for edifice recently noted; 42x75 feet; ordinary construction; cost \$6000.

Tenn., Erwin.—Methodist Episcopal church has plans by C. G. Mitchell for edifice to cost \$3000. Address The Pastor, Methodist Episcopal Church.

Tenn., Lebanon.—Presbyterian congregation will proceed with erection of proposed edifice; pressed brick; stone trimmings; seating capacity, 1000; cost \$25,000. Address The Pastor, Presbyterian Church.

Tenn., Nashville.—Russell St. Presbyterian Church will open bids March 21 for erection of edifice recently noted; 55x105 feet; steam heat; cost \$23,000; plans by C. K. Colley, Chamber of Commerce Bldg., Nashville.

Tex., Brownwood.—First Methodist congregation contemplates erecting edifice. Address The Pastor, First Methodist Church.

Tex., Denton.—First Baptist Church is having plans prepared for edifice; Dr. W. H. Bruce and others, committee.

Tex., Hondo.—Baptist congregation purchased site on which to erect \$5000 edifice. Address The Pastor, Baptist Church.

Tex., Rosebud.—M. E. Church South, Rev. S. S. McKenny, pastor, has plans by Flanders & Flanders, Dallas, Tex., for edifice; bids recently noted to be opened March 21; 98x76 feet; seating capacity 684; ordinary construction; furnaces; electric lighting; cost \$15,000; bids to be accompanied by certified check for \$500.

Va., Clarendon.—Catholic congregation will erect edifice. Address The Pastor, Catholic Church.

Va., Clarendon.—Baptist congregation will erect edifice. Address The Pastor, Baptist Church.

Va., Farley.—Episcopal congregation will, it is reported, erect edifice. Address The Pastor, Episcopal Church.

Va., Norton.—Baptist congregation will erect addition to edifice to be used as Sunday-school. Address The Pastor, Baptist Church.

Va., Petersburg.—Methodist congregation will erect edifice in Blandford. Address The Pastor, Methodist Church.

W. Va., Bethany.—Christian Church will erect Westminster building. Address The Pastor, Christian Church.

COURTHOUSES

Ark., Fort Smith.—Sebastian county is completing arrangements for erection of addition to Courthouse; connected to county jail by overhead passage; estimated cost \$150,000; Jesse A. Harp, County Judge.

La., Thibodaux.—Police Jury of Lafourche parish is considering remodeling of courthouse or erection of new structure.

Md., Hagerstown.—Washington County Commissioners will enlarge courthouse.

N. C., Greenville.—Pitt County Commissioners are considering erection of courthouse and jail.

Tex., Brackettville.—Kinney County Commissioners will erect courthouse to cost \$90,000.

Va., Covington.—Alleghany County Board of Supervisors invites architects to submit proposals on March 19 for architectural work, drawings, plans and specifications for county courthouse to cost within \$40,000, giving charge for plans and architectural oversight separately; right to reject proposals reserved; bidder to have no interest in proposal or contract for erection; J. J. Hobbs, clerk.

W. Va., Charlestown.—Jefferson County Commissioners will erect addition to courthouse; two stories; brick; 48x50 feet.

DWELLINGS

D. C., Washington.—Middaugh & Shannon, Ray E. Middaugh, president, 2405 1st St. N. W., will erect 14 dwellings in Ingleside; three stories; light brick; 11 rooms; cost \$85,000.

D. C., Washington.—Charles J. Walker, 1929 Calvert St. N. W., will erect 12 or 14 dwellings in Park Rd., between New Hampshire and Georgia Aves. N. W.; cost, including site, \$100,000.

D. C., Washington.—H. J. Mock, Star Bldg., will erect residence at Oak Knoll, on Rockville Rd.

D. C., Washington.—Charles J. Walker, 1929 Calvert St. N. W., will erect 12 or 14 dwellings on Park Rd.; three stories; cost \$100,000.

D. C., Washington.—Margaret A. McGee has plans by Hunter & Bell, 518 10th St. N. W., for two dwellings at 3452-3454 Newark St.; two stories; brick; cost \$11,000.

Fla., Orlando.—W. A. Ross will erect residence.

Fla., Tampa.—Hilton S. Hampton will erect \$4500 residence at Hyde Park.

Fla., Tampa.—Shaw & Jay are preparing plans for three residences to cost \$12,500.

La., Hammond.—J. N. Battinger of New Orleans, La., will erect residence.

La., New Orleans.—William Andrew Collins, 918 Hibernia Bldg., will erect residence.

La., New Orleans.—M. Blumenthal will proceed with erection of proposed dwelling; cost \$8000; fixtures purchased.

Md., Baltimore.—W. J. O'Brennan will open bids March 24 for erection of dwelling at Colonial Park recently noted; 30x53 feet; frame; hot-water heat; slate roof; cost \$4500; plans by E. E. Holman, Philadelphia, Pa. (See "Machinery Wanted.")

Md., Baltimore.—T. Milton Jones, 1504 Light St., will erect 15 two-story brick dwellings on Harvey St. near Webster St.; 11x45 feet each; 12 at 701-723 East Clement St. and two at 1457-1459 Covington St.; slag roofs; cost \$28,000.

Md., Baltimore.—John T. Whitehurst, 2902 North Calvert St., is having plans prepared by Mottu & White, Professional Bldg., Baltimore, for dwelling on Mount Royal Ave. near Whitelock St.; 46x40 feet; steam heat; two and a half stories; cost \$13,000.

Md., Baltimore.—G. W. Klein, 4133 Frederick Ave., purchased site at Walbrook and will erect 12 semi-detached cottages; brick; porch fronts; two stories; 15x49 feet; tin roofs; furnace heat; plans by Jacob F. Gerwig, 210 E. Lexington St., Baltimore.

Md., Baltimore.—Howard Realty Co., 315-17 Gaither Bldg., has plans by Stanislaus Russell, Clifton Ave. and 27th St., Baltimore, for residence on Clifton Ave.; two stories; brick; cost \$5000.

Md., Baltimore.—W. H. Clogg will expend \$4000 to erect dwelling; 35x50 feet; ordinary construction; hot-water heat. (John D. Thompson, Wilmington, Del., recently noted as preparing plans.)

Md., Baltimore.—Abel Rosenthal, 116½ Alsquith St., will erect 17 dwellings on Mulberry St., near Smallwood St.; two stories; brick; cost \$30,000.

Baltimore, Md.—G. H. Haynes, Belle Ave. near Garrison Ave., will erect dwelling at Duvall and Allendale Aves.; 26x27 feet; two and a half stories; frame; steam heat; slate roof; cost \$7000.

Md., Baltimore.—Edward J. Gallagher Realty Co., Lakewood and Eastern Aves., will erect 200 dwellings on Canton and Foster Aves.; two stories.

Md., Baltimore.—Rochester Kirkness Realty Co., care of Richard Von Hohenboff, 519 South Broadway, has plans by Charles H. Broring, Baltimore, for 28 dwellings on Hare St.; two stories; brick; 12x40 feet; tin roofs; cost \$34,000.

Md., Govans.—L. B. McCabe, York Rd. and McCabe Ave., has plans for four semi-detached dwellings on York Rd.; two and a half stories; cost \$12,000.

Md., Havre de Grace.—Plans are on file at Builders' Exchange, 15 East Fayette St., Baltimore, Md., for residence on Belair Rd., near Havre de Grace, for Lyman Perry; bids will be received until March 24.

Miss., Laurel.—Charles Green has plans by De Buys, Churchill & Labouisse, New Orleans, La., for concrete colonial-style nine-room residence.

Mo., Kansas City.—Robert Nesch will erect dwelling; vitrified brick; three stories.

Mo., Kansas City.—Z. T. Briggs and William P. Hall, Jr., will each erect residence.

Mo., Kansas City.—Clifford Langsdale will erect residence.

Mo., Kansas City.—J. W. Slavin, 3737 Genesee St., will erect residence.

Mo., St. Louis.—Thomas Geckle will erect two seven-room residences.

N. C., Charlotte.—Rev. W. L. Nicholson purchased dwelling and will remodel into colonial residence.

N. C., Charlotte.—Frank R. McNinch is having plans prepared for residence.

N. C., Charlotte.—Mr. Ballinger has plans by Louis H. Asbury, Charlotte, for residence; 12 rooms; colonial type; frame; brick foundations; steam heat; electric lighting; cost \$3000.

N. C., Concord.—Charles A. Dry will erect residence.

N. C., Goldsboro.—Postoffice.—R. H. Richardson & Son, Hampton, Va., are lowest bidders at about \$10,000 for erection of addition to United States postoffice. (Recently mentioned.)

N. C., Greensboro.—R. M. Douglas will not erect dwelling. (Recently incorrectly reported.)

N. C., Winston-Salem.—R. T. Holbrook awarded contract to Irvin McIver, Winston-

Salem, for erection of residence; two stories; slate roof; frame; cost \$6000.

Okla., Tulsa.—H. C. Calhoun will erect dwelling; two stories; frame; cost \$2500.

Okla., Tulsa.—Starr & Borden, architects, Room 16 Nebraska Bldg., Tulsa, will receive bids until March 19 for erection of residence for Robert Galbreath; certified check for \$500, payable to Robert Galbreath; plans and specifications on file at office of architects as above.

S. C., Yorkville.—John B. Sloane is having plans prepared by J. S. Starr, Rock Hill, S. C., for proposed eight-room dwelling.

Tenn., Chattanooga.—R. D. Twinn accepted plans by J. G. Barnwell of Chattanooga for apartment-house; brick; two stories and basement; 110x123 feet; 58 rooms, divided into 10 five-room apartments and two four-room apartments; 12 bathrooms, one to each apartment; hard pine interior finish; heating not decided; will open bids about March 19.

Tenn., Chattanooga.—C. A. Grimmer, 1916 McCallie Ave., is having plans prepared by Huntington & Sears, James Bldg., Chattanooga, for 1½-story dwelling.

Tenn., Knoxville.—James G. Sterchl has plans by R. F. Graf, Knoxville, and is receiving bids for erection of residence on Jackboro Pike; colonial design; veranda with massive columns; will have private water-works and electric-light plant; water-power for operating dynamos.

Tenn., Knoxville.—W. T. Bellew awarded contract for erection of residence.

Tenn., Knoxville.—Charles A. Hayes will erect residence; Dutch colonial style; steam heat, etc.

Tenn., Lookout Mountain.—Morris Freidman, 830 Market St., will award contract about March 19 for erection of dwelling; one story; bungalow style; hard pine interior finish; shingle roof; cabinet mantels; electric lighting.

Tenn., Memphis.—Mrs. Getty Hirsch's dwelling will be 36x50 feet; ordinary construction; hot-water heat; cost \$8000; recently noted as having plans prepared by John Gaisford, 309 Royal Bldg., Memphis, Tenn.; contract not let.

Tenn., Morristown.—First Baptist Church will open bids about March 23 for erection of parsonage recently noted; 42x54 feet; ordinary construction; steam or hot-water heat; cost \$4000; plans by A. B. Willing, Morristown. (See "Machinery Wanted.")

Tenn., Morristown.—J. C. Matthes will erect residence.

Tenn., Nashville.—J. C. Cummings will erect residence; two stories; brick; cost \$5500.

Tex., Brownwood.—First Methodist Church will erect parsonage. Address The Pastor, First Methodist Church.

Tex., Dallas.—B. G. Howard will erect residence; 10 rooms; frame; cost \$3600.

Tex., Pittsburg.—W. C. Hargrove, care of First National Bank, will expend \$30,000 to erect 10-room dwelling recently noted; ordinary construction; brick veneer; probably hot-water heat; day's labor. (See "Machinery Wanted.")

Va., Richmond.—Mrs. Eva C. Emerson will erect two-story frame tenement (two dwellings); cost \$3500.

Va., Fredericksburg.—Edward T. Peyton will erect residence.

Va., Fishersville.—L. C. and E. S. Young will probably erect dwelling.

Va., Richmond.—Henry Holzgreffe will erect two two-story brick tenements (four dwellings); cost \$10,000.

W. Va., Bramwell.—Edward Cooper will erect residence.

W. Va., Bramwell.—W. H. Thomas will erect residence; cost \$40,000.

W. Va., Grafton.—Taylor County Bank will erect dwelling.

W. Va., Princeton.—B. W. Pendleton has plans by A. F. Wyson, Princeton, for proposed dwelling; 47x53 feet; pressed brick; slate roof; cost \$3000.

GOVERNMENT AND STATE BUILDINGS

Ark., Hot Springs.—Postoffice.—Ceel L. Saunders, Clifton Forge, Va., is lowest bidder at \$47,000 for extension and remodeling of U. S. postoffice. James Knox Taylor, Treasury Department, Washington, D. C., is supervising architect. (Recently mentioned.)

Ga., Athens.—Postoffice and Courthouse.—Newport News Contracting & Engineering Co., J. M. Dozier, local manager, Newport News, Va., is lowest bidder at \$42,750 for erection of extension and remodeling of United States postoffice and courthouse. (Recently mentioned.)

N. C., Raleigh.—Fair Building.—North Carolina Agricultural Association will expend \$10,000 in erection of building 200x60 feet at Fair Grounds; for agricultural and horticultural purposes; Joseph E. Pogue, secretary North Carolina State Fair. (Recently mentioned.)

Okla., Enid.—Postoffice, etc.—Treasury Department, office of supervising architect, James Knox Taylor, Washington, D. C.—Sealed proposals will be received until April 27, and then opened, for construction complete (including plumbing, gaspiping, heating apparatus, electric conduits and wiring) of United States postoffice and courthouse at Enid, in accordance with drawings and specification, copies of which may be obtained from custodian of site at Enid, or at this office, at discretion of architect.

Tenn., Jackson.—Postoffice and Courthouse.—George Moore & Son, Nashville, Tenn., have contract at \$45,700 for extension, remodeling, etc., of U. S. postoffice and courthouse. (Recently mentioned.)

Tex., Galveston.—Life-saving Station.—Bids will be received at office of S. I. Kimball, general superintendent, Treasury Department, U. S. Life-saving Service, Washington, D. C., until March 29 for construction of life-saving station on Pelican Spit; bungalow design, with 35-foot tower for watchrooms and verandas; contract will include construction of bulkhead (enclosing lot 150x200 feet), filling in of area enclosed with sand to level of 6 feet 9 inches above mean low tide of channel, erection of launchway, boat-house, dwelling, barn, two cisterns, etc.; launchway will be 104 feet long, including portion with boat-house; will have galvanized metal work and piling 12 inches in diameter; estimated cost, \$15,000; specifications and drawings, forms of proposal, etc., obtained on application to Superintendent of Ninth Life-saving District, Galveston; superintendents of construction of life-saving stations, 379 Washington St., New York, and collector of customs, New Orleans, La., or to Mr. Kimball's office.

Va., Lynchburg.—Postoffice and Courthouse.—Joseph Seay & Co. of Lynchburg are lowest bidders at \$131,831 for extension, etc., of U. S. postoffice and courthouse; James Knox Taylor, supervising architect, Treasury Department, Washington, D. C. (Recently mentioned.)

Va., Portsmouth.—Barracks.—R. H. Richardson & Son, Newport News, Va., have contract to erect marine barracks in Portsmouth Navy-Yard.

HOTELS

Ala., Florence.—John T. Jones purchased Alabama Hotel, and will remodel.

D. C., Washington.—John O. Siebert, 1325 18th St. N. W., purchased Elsmere Hotel at 1408 H St. N. W., and will remodel; structure is four stories high, of brick and stone.

Ga., Thomasville.—H. G. Kelgwin, Washington, D. C., is interested, it is reported, in erection of hotel to cost about \$150,000.

La., Monroe.—Wahrer-Doughtie Hotel Co. (address until October 1, Meridian, Miss.) will make improvements to hotel owned by Geo. F. Wahrer on expiration of present lease, October 1; building now has 67 rooms; 60 rooms will be added; also lobby, dining-rooms, etc.; cost \$50,000; brick and stone construction; hot-water heat; lighting undecided; passenger elevator; plans by J. W. Stanton, Vicksburg, Miss.; contract to be awarded in fall. (Recently noted.)

Miss., Hazelhurst.—J. S. Sexton and G. W. Covington of Hazelhurst, S. J. Thigpen, Vicksburg, Miss., and others have acquired Brown's Wells property, about 10 miles from Hazelhurst; will form company with \$50,000 capital; contemplate erection of new 200-room house next year; reported to construct road from Hazelhurst to the Wells and operate automobile line; Mr. Thigpen to be general manager.

Miss., Jackson.—Carnes & Jones contemplate rebuilding burned Norville Hotel; site fronts 100 feet on Capitol St. and 150 feet on Congress St.

Mo., Westport, Station Kansas City.—J. R. Kelley is interested in erection of three-story concrete building to contain hotel, offices and stores; J. W. McKecknie of Kansas City is preparing plans.

Okla., Oklahoma City.—Dr. J. A. Ryan awarded contract to G. W. Barnett of Oklahoma City to erect brick and concrete hotel at 112-114 Harrison St., to be used in connection with adjoining Voties Hotel.

Okla., Tulsa.—Tate Brady will, it is reported, replace present three-story portion of Brady Hotel with seven-story fireproof building to conform to seven-story additions now being erected; hotel will have total frontage of 240 feet, and contain 400 rooms.

S. C., Spartanburg.—T. A. Green is having

plans prepared by S. P. Tinsley of Spartanburg for hotel for J. T. Gresham and E. L. Wilson; structure is to be six stories; 50x100 feet; plate-glass front; stone trimmings; dining room, 26x46 feet; 100 bedrooms; bathrooms; estimated cost \$40,000. (Recently mentioned.)

Tenn., Knoxville.—J. G. Sterchi will have plans prepared by R. F. Graf of Knoxville for erection of two additional stories to main building and annex of Stratford Hotel; provide 50 additional rooms with bath facilities; addition 50x120 feet; brick; cost \$20,000; new electric lighting plant; contract to be let.

Tex., Coleman.—W. N. Cameron has plans for hotel; brick; steam heat; cost \$35,000.

Tex., El Paso.—Sheldon Hotel Co. contemplates expending \$75,000 in enlarging and remodeling hotel.

Tex., Galveston.—Galveston Hotel Co. organized with I. H. Kempner president, B. Adoue vice-president, E. O. Flood second vice-president, John Sealy treasurer and J. H. Langbehn secretary; will erect hotel to cost \$500,000.

Tex., Quannah.—William Cameron, president William Cameron Company, is having plans prepared for three or four-story hotel to cost \$50,000 to \$75,000.

Tex., Waco.—Waverly Hotel Co. will enlarge hotel; one or two-story addition, containing about 45 rooms.

Va., Harrisonburg.—Kavanaugh Hotel Co. will erect 25-room addition.

MISCELLANEOUS STRUCTURES

Ala., Brickyard.—F. M. Flourney will rebuild structures reported burned; will erect three buildings; one 26x100 feet; two 30x125 feet each; ordinary construction; cost within \$10,000; plans and construction by owner; no material needed. (See "Machinery Wanted.")

Ala., Gadsden.—Business.—E. T. Schuler will erect business building; 100x50 feet.

Ala., Mobile.—Store.—C. J. Gayler & Co. have plans for three-story store building adjoining present structure and remodeling present building.

Ala., Opelika.—Store.—L. F. Dickson's building, recently incorrectly noted as "school," will be for wholesale store purposes. (See "Machinery Wanted.")

Ala., Talladega.—Lodge.—Masonic Lodge is planning to erect \$75,000 temple.

Ark., Argenta.—Store and Lodge.—C. K. Lincoln has plans by H. J. Harker, Little Rock, Ark., for building recently noted; three stories; 65x60 feet; four stores on ground floor, lodge hall above; cost \$10,000.

Ark., Corning.—Business.—W. D. Polk will erect brick business building; 48x30 feet.

Ark., Corning.—Business.—G. B. Oliver will erect business building.

Ark., Hope.—Hempstead County Medical Society will erect hospital building.

Ark., Heber.—Business.—J. R. Baker contemplates erection of brick business building.

La., New Orleans.—Store.—Krauss Co., Ltd., will erect addition in rear of present structure; five stories; brick; pressed brick facings; elevators; will also remodel interior of present building; plans by Emil Welle, 616 Ithieria Bldg., New Orleans; ground dimensions of two structures, 125x136 feet.

Ark., Little Rock.—Store.—Ike Kemper & Bro. will expend \$15,000 for addition to and improving store building; new front and rear walls and rebuild rear of side wall; install new stairway and parcel-carrier system.

Ark.-Tex., Texarkana.—Lodge.—Camp No. 19, Woodmen of the World, will organize company to erect \$20,000 lodge building.

Fla., Jacksonville.—Store.—Fred W. Howard has plans by Rutledge Holmes, Jacksonville, for store building recently noted; 70x80 feet; mill construction; cost \$8000. Address architect. (See "Machinery Wanted.")

Fla., St. Petersburg.—Arcade.—Peter Toneller, Benton Harbor, Mich., will erect arcade building; three stories; 40x100 feet; red-pressed brick; passageway 16 feet wide, with stairway leading to second floor; light shaft 24x40 feet; balcony on second and third floors around light shaft; electric lights; 16-inch cement walls on first floor; upper walls, 12 inches thick; sliding windows; cost \$20,000.

Ga., Augusta.—Parish-house.—St. Paul's Church is arranging to erect \$15,000 parish-house. Address The Pastor, St. Paul's Church.

Ga., Columbus.—Business.—R. W. Needham will rebuild business building recently reported burned at loss of \$20,000; will use two side walls now standing; will replace front wall with larger pressed brick wall;

thick fire wall between building and adjoining property.

Ga., Rome.—Store.—W. H. Wilkerson will erect store building.

Ky., Dayton.—Hospital.—Speers Hospital has plans by L. H. Wilson, Newport, Ky., for addition to hospital; three stories; 37x50 feet; red brick and stone; galvanized-iron cornice, etc.; cost \$12,000.

Ky., Louisville.—Clubhouse.—Business Women's Club has plans by Gray & Hawkes, Louisville, for clubhouse to replace present structure; cost \$100,000.

Ky., Louisville.—Stores.—Philip Gaertner will erect four store buildings; three stories; brick and stone; cost \$75,000.

La., Monroe.—Jail.—Onachita Parish Police Jury contemplates erection of jail.

La., New Orleans.—Store.—John Gauche's Sons, Ltd., 614 Canal St., has plans for store building to replace present structure; three stories; brick; fireproof.

La., Plaquemine.—Business.—H. Ephraim and A. Berrett will erect brick business building.

La., Shreveport.—Store.—Mr. Querbes, Texas and Louisiana Sts., will erect store building to contain eight stores; two stories.

La., St. Bernard.—Jail.—St. Bernard Parish Police Jury is considering bid of Pauly Jail Building Co., St. Louis, Mo., for erection of proposed jail.

Md., Baltimore.—Store and Dwelling.—Geo. J. Kaiser, 206 Frederick Rd., will erect three-story store and dwelling on Frederick Ave., between Bentalou St. and Wilkens Ave.; 18x30 feet; cost \$3500.

Md., Baltimore.—Store.—E. Allen Sauerwein, Calvert Bldg., is having plans prepared by R. T. Sauerwein, Wylie Ave., near Park Heights Ave., Baltimore, for store building at 233-234 North Howard St.; four stories; brick; 30x96 feet.

Md., Baltimore.—Stable.—Jacob Schwind, 625-626 Law Bldg., will erect stable on Lanvale St., between 5th and 6th Sts.; cost \$5000.

Mo., Kansas City.—Business.—Emma S. Meyer will erect business building; four stories; brick; 23x115 feet; cost \$16,000.

Miss., Greenville.—Store.—S. H. Kress & Co., main office, 336 Broadway, New York, will soon erect store building.

Mo., Kansas City.—Business.—Ridenour-Baker Grocery Co., 933 Mulberry St., is having plans prepared by J. W. McKecknie, Kansas City, for seven-story addition 60x120 feet, and will probably erect three additional stories to present structure, to conform with new structure.

Mo., Kansas City.—Hospital.—St. Luke's Charity Hospital, 11th St. and Euclid Ave., will erect structure to replace present building; four stories; cost \$100,000.

N. C., Charlotte.—Store.—Kuester-Pharr Co. has not selected architect to prepare plans for three-story building; 120x170 feet; mill construction; cost \$25,000. (Hunter & Gordon, Charlotte, recently noted as preparing plans.)

N. C., Lexington.—Home.—Davidson County Commissioners will erect county home.

N. C., Raleigh.—Agricultural Building.—North Carolina Agricultural Society is planning to erect agricultural and horticultural building; has plans for structure 60x200 feet; frame construction; floor capable of holding 100 pounds per square foot; cost \$5000.

Okla., Hobart.—Business.—James Mask will erect business block; brick; two stories; steam heat; upper floor for annex to Hotel Harding.

Okla., Lawton.—Business.—A. Lowinger will erect business building; 120x25 feet; carved-stone front.

Okla., Oklahoma City.—Business.—Burlingham & Crane Co. will erect three-story business building.

Okla., Tulsa.—Business.—C. W. Alexander will erect business building; six stories; fireproof; concrete, with granite facing.

S. C., Chester.—Temple.—Chester Masonic Lodge, No. 18, is planning to erect Masonic Temple; three stories; brick.

S. C., Clinton.—Copeland-Stone Co. has plans by M. S. Hampton, Laurens, S. C., for store buildings recently noted; two 25x100 feet, and three 16x50 feet; ordinary construction; heating and lighting not decided; cost within \$8000; no contracts to be awarded.

S. C., Covington.—Lodge.—Fraternal Order of Eagles purchased Turner Hall, and will remodel for lodge.

S. C., Florence.—Business.—James D. Evans will erect business building; three stories; brick.

S. C., Greenwood.—Grier & Park will open bids in April for erection of three-story building (recently noted under Greenville,

S. C.); 68x110 feet; steam heat; electric lighting; plans by Thos. W. Cothran, Greenwood. (See "Machinery Wanted.")

S. C., Sumter.—Store.—S. H. Kress & Co., main office, 336 Broadway, New York, will soon begin construction of proposed store building at Main and Caldwell Sts.; brick, stone and reinforced concrete; concrete floors; tile roof.

S. C., Union.—Business.—J. H. Gault will erect two-and-a-half-story business building; size, 24x120 feet; cost \$3000.

S. C., Yorkville.—S. M. McNeal is having plans prepared by J. S. Starr, Rock Hill, S. C., for store building recently noted; to contain offices and small theater; pressed brick; plate-glass front with stone trimmings; prism lights; composition roof. (See "Machinery Wanted.")

Tenn., Bristol.—Business.—W. T. Sams owner, will erect two-story building to be occupied by Eagle Overall Co.; structure 50x150 feet; cost \$7500.

Tenn., Erwin.—Hospital.—C. P. Edwards is interested in erection of hospital; eight wards; plans in progress.

Tenn., Knoxville.—Lodge.—Masonic Temple Association purchased Borchers Bldg. for \$60,000 and will remodel for Masonic Temple.

Tenn., Memphis.—Store and Office.—Otto Schwill & Co., 20 North Front St., will erect store and office building; fireproof.

Tex., Dallas.—Business.—J. E. Pearce, Austin, Tex., purchased site 50x94 feet and will erect business building; three or four stories.

Tex., Denison.—Lodge.—Woodmen of the World planning to erect lodge building; two stories; cost \$10,000.

Tex., El Paso.—Business.—W. J. Fewell will erect eight-story reinforced concrete business block.

Tex., El Paso.—Business.—Z. T. White will erect business building; reinforced concrete; nine stories; 54x120 feet.

Tex., El Paso.—Business.—W. D. Reckhart has plans for business building; three stories; cost \$40,000.

Tex., El Paso.—Business.—H. B. and C. B. Stevens will erect four-story business building.

Tex., El Paso.—Business.—J. A. Dick & Co. will erect three-story-and-basement business building; 34,200 square feet floor space.

Tex., El Paso.—Business.—O. H. Baum, Z. T. White, L. E. Brooker and George Look will erect business buildings on West San Antonio St.; to cost \$250,000.

Tex., Falfurrias.—Store.—Falfurrias Mercantile Co. will erect store building; brick; cost \$20,000; plans by J. B. Leffer, Victoria, Tex.

Tex., San Angelo.—Lodge.—Elks' Lodge contemplates erection of clubhouse; cost \$30,000.

Tex., San Antonio.—Business.—Frank Talorico will erect brick business building.

Tex., San Saba.—Store.—W. R. Smith, architect, San Saba, will soon award contract for erection of stone and brick store building; 30x100 feet.

Tex., Seguin.—Store.—Sam and Will Blank will erect two-story brick store building; cost \$5000.

Tex., Sweetwater.—Stores.—Crane & Bradford will open bids about March 25 for erection of store building; 50x100 feet; fireproof construction; steam heat; electric lighting; cost within \$30,000; plans by Parry & Spicer, Sweetwater. (Contract recently incorrectly noted awarded to Anderson & Hay, Sweetwater.)

Tex., Taylor.—Lodge.—Elks' Lodge will erect lodge building.

Va., Portsmouth.—Hospital.—King's Daughters' Hospital is planning to erect \$10,000 wing.

Va., Pulaski.—Lodge.—Pulaski Lodge of Elks plans erection of lodge building to contain lodgerooms and opera-house; D. F. Agnew, Exalted Ruler.

Va., Richmond.—Store.—J. J. Steinbrecher will erect three-story brick tenement (two stories); cost \$15,000.

Va., Richmond.—Stores and Dwellings.—I. Kaplan will erect two stores and dwellings; brick; cost \$4800.

Va., Roanoke.—Stores, etc.—Nelson Investment Co., has plans by H. M. Miller, Roanoke, for store and hotel annex; brick; 100 x96 feet; pressed brick; terra-cotta trimmings; electric lights; lower floor divided into four stores; upper annex to Shenandoah Hotel.

MUNICIPAL BUILDINGS

Ala., Mobile.—City Hall.—City will have plans prepared by Downey & Benham of Mobile for improvements to city hall; Pat J. Lyons, Mayor.

Ala., Mobile.—City Hall.—Committee accepted plans by Downey & Benham of Mobile for remodeling city hall.

Ga., Dalton.—Fire Station.—City will vote on issuance of \$5000 of bonds for fire department headquarters. Address The Mayor.

La., New Orleans.—Library.—Library Board, J. H. Dillard, president, authorized building committee (John Fitzpatrick and others) to invite architects to submit plans for branch library.

Md., Baltimore.—Public Bath.—City will erect public bath in South Baltimore; \$30,000 available; Edward A. Preston, Building Inspector, City Hall.

Md., Baltimore.—Armory.—City will expend \$5000 in repairing Fourth Regiment Armory on West Fayette St.; Edward A. Preston, City Hall, Building Inspector.

Md., Cumberland.—City Hall.—City will petition Legislature for authority to issue \$100,000 of bonds for erection of city hall to replace structure reported burned. Address The Mayor.

N. C., Burlington.—City Hall.—City contemplates erection of City Hall. M. Luther Cates, Chairman of Building Committee.

Okla., Enid.—City has plans by C. H. Sexton, City Engineer, for jail; bonds recently noted; 24x32 feet; brick; steel cells; cost \$6000.

Okla., Tulsa.—City Hall.—City defeated \$100,000 bond issue for purchasing site and erecting city hall; John O. Mitchell, Mayor. (Recently mentioned.)

Okla., Walters.—City Hall.—City voted \$30,000 bond issue for erection of city hall. Address The Mayor.

Tex., Fort Worth.—Market-house and Auditorium.—City will vote April 7 on issuance of \$100,000 of bonds for erection of combined market-house and auditorium. Address The Mayor.

Tex., Fort Worth.—Fire Stations.—City will erect three fire stations, each two stories and cost \$10,000; buildings to be of ordinary mill construction; plans by Sanguinet & Staats, Fort Worth; contract not let. Address George Mulkey, Commissioner of Fire and Police.

Tex., Greenville.—Fire Stations.—City will award contract about April 1 for erection of two fire stations recently noted; 32x45 feet each; mill construction; cost \$7500 each; plans by George Lindsey, Greenville.

Tex., Lockhart.—City Hall and Fire Station.—City will vote April 11 on issuance of \$15,000 of bonds for erection of city hall and fire station combined. Address The Mayor. (Recently mentioned.)

Tex., Plainview.—City Hall.—City will vote March 26 on \$10,000 bonds for city hall. Address The Mayor.

Tex., San Angelo.—Fire Station.—City Council is considering plans for \$15,000 fire station. Address The Mayor.

Va., Clarendon.—Town Hall and Engine-house.—Clarendon Citizens' Association will erect town hall and engine-house; construction begun.

Va., Clifton Forge.—Courthouse and Jail.—City contemplates erection of courthouse to contain offices for city officials and jail. Address The Mayor.

W. Va., Huntington.—City Hall.—City will vote May 3 on issuance of \$30,000 of bonds for erection of city building. Address The Mayor. (Recently mentioned.)

RAILWAY STATIONS

La., Shreveport.—St. Louis Southwestern Railway, M. L. Lynch, chief engineer, Tyler, Tex., and Louisiana & Arkansas Railway, W. H. Vance, engineer maintenance of way, Stamps, Ark., awarded contract. It is reported to Casey & Miller of Shreveport to erect passenger station to cost \$45,000.

Md., Hagerstown.—Cumberland Valley Railroad, M. C. Kennedy, general superintendent, Chambersburg, Pa., will, it is reported, expend \$500,000 in improvements, including depot. (See "Railway Shops, Terminals, Roundhouses, etc.")

S. C., Greenville.—Southern Railway, W. H. Wells, chief engineer of construction, Washington, D. C., will, it is reported, erect outgoing freight depot, to cost \$25,000.

Tex., Bridgeport.—Chicago, Rock Island & Gulf Railway, A. B. Warner, chief engineer, Fort Worth, Tex., will erect depot.

Tex., Kinville.—St. Louis, Brownsville & Mexico Railway, E. C. Burgess, engineer construction, is having plans prepared for depot and office building; two stories; brick; cost \$32,000.

Tex., Wichita Falls.—Wichita Falls & Northwestern Railway, R. A. Thompson, chief engineer, and Fort Worth & Denver

City Railway, R. C. Gowdy, chief engineer, Fort Worth, Tex., will erect union station; 780 feet long; estimated cost \$200,000.

Va., Abingdon.—Norfolk & Western Railway, C. S. Churchill, chief engineer, Roanoke, Va., will, it is reported, erect \$25,000 passenger station.

Va., Petersburg.—Seaboard Air Line Railway, W. L. Seddon, chief engineer, Portsmouth, Va., will erect brick depot to replace burned structure.

Va., Norfolk.—Norfolk Terminal Railway Co., L. E. Johnson, president, Roanoke, Va., adopted preliminary plans by Reed & Stem, 7 East 42d St., New York, for union passenger station and office building on East Main St.; 200x110 feet; brick with steel frame; fireproof; probably six stories high; waiting-rooms to have mosaic flooring; offices, concrete flooring overlaid with pine; entrance lobby from East Main St., 40x50 feet; waiting-room for white persons, 56x100 feet; 14 railway tracks to enter station from rear; estimated total cost \$1,000,000. (Recently mentioned.)

W. Va., Wheeling.—Baltimore & Ohio Railroad, A. M. Kinsman, chief engineer, Baltimore, Md., contemplates erecting freight station and laying additional tracks; estimated cost, \$100,000.

SCHOOLS

Ala., Guntersville.—City is planning erection of \$25,000 school. Address The Mayor.

Ala., Mobile.—Mobile County Commissioners will soon advertise for competitive plans for Lura Craighead School at Oakdale; 12 rooms and auditorium; W. H. Council School in Augusta St., and six-room and auditorium school at Citronelle; also authorized Supervisor McNeill to draft plans for schools at Spring Hill and Prichards; will also soon advertise for bids for erection of W. H. Council School and addition to Leinlauf School; plans by Mr. McNeill.

Ark., Russellville.—City will soon award contracts for erection of two schools; cost \$12,000 and \$10,000. Address The Mayor. (Recently mentioned.)

Fla., Bonifay.—City voted \$14,000 of bonds to erect school. Address The Mayor.

Fla., Tallahassee.—Leon County School Board has plans by T. F. Lockwood, Columbus, Ga., for proposed school; cost \$30,000.

Ga., Augusta.—Georgia School of Technology, K. G. Matheson, president, is planning to erect \$75,000 Y. M. C. A. building.

Ga., Cyrene.—Bowden High School has plans by Alexander Blair, Macon, Ga., for proposed dormitory; 50 rooms; steam heat; electric lights, etc.

Ga., Fredericksburg.—Fredericksburg Normal School, E. H. Russell, president, received appropriation of \$50,000 for permanent improvements in 1910, \$70,000 for improvements in 1911 and \$15,000 for maintenance in 1911.

Ga., Macon.—Mt. De Sales Academy will erect college building; convent style; cost \$100,000; plans by Alexander Blair, Macon.

Ky., Louisville.—City contemplates expending \$40,000 for erection of negro school at Morgan and Bland Sts., to replace present school at Shelby and Barnett Sts. Address The Mayor.

La., Monroe.—Ouachita parish contemplates voting on five-mill tax for school improvements. Address Police Jury.

La., New Orleans.—City is considering plans by E. A. Christy, New Orleans, for proposed Webster School; 16 classrooms and kindergarten; purple brown pressed brick; white trimmings; brown glazed tile roof; hot-water heat; vacuum cleaning system; forced air ventilating system; fireproof boiler-room; electric lights; 80-foot corridors; marble vestibule; automatic doors. (Previously mentioned.)

Md., Baltimore.—Board of Awards will receive bids at office of J. Sewell Thomas, City Register, City Hall, until March 23 for erection of No. 51 school at Carroll and Windmere Aves.; certified check on clearing-house bank for \$500, payable to Mayor and City Council of Baltimore; drawings and specifications on file at office of Edward D. Preston, Inspector of Buildings, City Hall; J. Barry Mahool, president Board of Awards.

Md., Baltimore.—Bill will be introduced in Legislature by J. Charles Linthicum, 220 St. Paul St., to provide \$500,000 appropriation for erection of State Normal School to replace present structure.

Miss., Meridian.—Mississippi Medical College will erect college and hospital building to replace burned structure; cost \$50,000 to \$75,000.

Mo., Joplin.—City will vote March 28 on \$75,000 bond issue for school improvements. Address The Mayor.

Mo., St. Louis.—Alumnae Association of

Visitation Convent reported to erect founders' hall.

N. C., Lawndale.—Piedmont High School will rebuild structure reported burned; loss \$9000.

N. C., West Raleigh.—Agricultural and Mechanical College will receive bids at office of the president until April 14 for erection of engineering building; plans on file at office of Frank B. Simpson, architect, Capitol Club Bldg., Raleigh, N. C.

Okla., Oklahoma City.—Holiness College is contemplating erection of \$50,000 building; J. V. Vawter, Arthur Beaver, L. F. Braniger and others, trustees.

Okla., Tulsa.—City is arranging to erect \$30,000 school in Highlands addition. Address The Mayor.

Okla., Willow.—Greer County School District No. 72 voted \$7500 bond issue for school buildings.

Okla., Woodward.—City will erect high school and two ward schools. Address The Mayor.

S. C., Orangeburg.—Colored Normal and Industrial College will rebuild burned kitchen and dining-room; is considering erection of dormitory.

Tenn., Bakersville.—Mountain School of Southern Baptist Convention, E. A. Brown, superintendent, will erect \$6000 school building and boys' dormitory.

Tenn., Chattanooga.—City authorized Adams & Alsop, James Bldg., Chattanooga, to prepare plans and specifications for 10-room grammar school building on Jefferson St., previously mentioned; two stories; brick; cost \$35,000; T. C. Thompson, Mayor.

Tenn., Chattanooga.—City authorized Chas. E. Bearden, Chamberlain Bldg., Chattanooga, to prepare plans and specifications for 15-room school building on McCallie Ave., previously mentioned; two stories and basement; 72x176 feet; brick; stone trimmings; steam heat; cost \$70,000; T. C. Thompson, Mayor.

Tenn., Chattanooga.—City authorized Huntington & Sears, James Bldg., Chattanooga, to prepare plans and specifications for five-room school building in ninth ward, previously mentioned; two stories; brick; cost \$15,000; T. C. Thompson, Mayor.

Tenn., Chattanooga.—City authorized Chas. E. Bearden, Chamberlain Bldg., Chattanooga, to prepare plans and specifications for six-room grammar school building at 4th and Chestnut Sts., previously mentioned; two stories; brick; cost \$30,000; T. C. Thompson, Mayor.

Tenn., Franklin.—Battle Ground Academy will rebuild school recently reported burned; loss \$10,000.

Tenn., Knoxville.—Knox County Industrial School will rebuild structure reported burned; loss \$5000; James Maynard, chairman of trustees.

Tenn., Lonsdale, R. Station Knoxville.—City will issue \$30,000 of bonds for street and school improvements. Address The Mayor.

Tenn., Maryville.—City will issue \$30,000 worth of bonds to erect school; R. H. Hannah, Mayor.

Tenn., Morristown.—Hamblen County Board of Education will receive bids until April 2 for erection of two schools; to be completed by July; plans and specifications on file at office of County Clerk, Morristown, and of J. H. Wall, Russellville, Tenn.

Tenn., Nashville.—Trustees of George Peabody College for Teachers are planning erection of proposed college.

Tex., Burkburnett.—Wichita County voted \$16,000 of bonds to erect brick school. Address County Commissioners. (Recently mentioned.)

Tex., Beaumont.—School Board is planning to erect two \$35,000 and two \$16,500 schools. A. Babin, Supervisor of New Schools.

Tex., Canyon City.—City voted \$10,000 of bonds to erect addition to high school. Address The Mayor.

Tex., Carlton.—Bids will be received at Farmers & Merchants' Bank until March 24 for erection of two-story brick school; certified check for \$300, payable to R. A. Smith, president of School Board; plans and specifications on file at office of Taylor & Wolfe, Continental Bank Bldg., Fort Worth, Tex., or at Farmers & Merchants' Bank, Carlton.

Tex., Electra.—City will vote March 31 on \$12,500 bond issue to erect school. Address The Mayor.

Tex., Falfurrias.—City is planning erection of \$25,000 high school. Address The Mayor.

Tex., Groesbeck.—Groesbeck Independent School District contemplates issuance of \$20,000 of bonds to erect high school; C. S. Bradley, Judge.

Tex., Kileen.—City voted bonds to erect

proposed high school; cost \$15,000. Address The Mayor.

Tex., Lockney.—City voted \$13,500 of bonds to erect school. Address The Mayor. (Previously mentioned.)

Tex., McDade.—J. B. Watson, president of School Board, will receive bids until April 1 for erection two-story brick school; certified check for \$100; plans and specifications on file at office of J. B. Hardwick, architect, Elgin, Tex., and of Van L. Taylor, secretary of board, McDade.

Tex., Paint Rock.—City will soon call bids for erection of \$16,000 stone school. Address The Mayor.

Tex., Pendleton.—Bell County Commissioners will vote April 2 on \$3000 bond issue to be used in connection with \$7000 worth of bonds (previously reported voted) to erect \$10,000 school.

Tex., Quanah.—Board of Trustees, Quanah Independent School District, will soon adopt plans for one-story four-room brick school; concrete foundation; basement boiler-room; cost \$8000; construction to permit erection of additional story; J. R. Polindexter, president of board.

Tex., San Antonio.—Rev. A. W. S. Garden of Garden Academy, 10th St. and Ave. C, will erect school in Highland Addition to replace present structure; cost \$30,000.

Tex., Seminole.—Trustees Seminole School District will receive bids until March 25 for erection of two-story frame school; certified check for \$500, payable to order of Seminole National Bank; plans and specifications from B. G. Leake, architect, Fort Worth, Tex.; of board of trustees, Seminole, on deposit of \$10; W. H. Brennand, secretary, Seminole.

Tex., Tomball.—City voted \$6000 of bonds to erect brick school. Address The Mayor.

Tex., West.—School Board, C. M. Haloway, president, will expend \$6000 to erect brick school building; bond issue recently noted.

Tex., Whitney.—City is proceeding with erection of proposed addition to high school; cost \$6000. Address The Mayor.

Tex., Wichita Falls.—City will vote April 5 on \$40,000 bond issue to erect school. Address The Mayor.

Va., Chatham.—City will vote on \$3000 bond issue for addition to school building; date of election not decided. J. H. Hargrave, Jr., Mayor.

Va., Chatham.—Chatham Training School will erect \$12,000 building; three stories; brick; 45x75 feet; Rev. T. R. Sanford, J. I. Overby and J. H. Hargrave, Jr., building committee; plans by H. Caldwell, Lynchburg, Va.

Va., Disputanta.—City has plans by C. M. Robinson, 10th and Main Sts., Richmond, Va., for \$5000 school. (Recently mentioned.)

Va., Lynchburg.—Special Building Committee of School Board will receive bids until March 23 for erection of high school; certified check for \$3000 payable to B. F. Kirkpatrick, chairman; plans and specifications on file at office of Frye & Chesterman, architects, Rooms 14, 15 and 16, Lynchburg National Bank Bldg., Lynchburg.

Va., Norfolk.—School Board, Richard A. Doble, division superintendent, will expend about \$60,000 to erect four brick school buildings; recently noted as having plans prepared by Ferguson, Callow & Taylor, Norfolk.

Va., Norfolk.—Board of School Trustees petitioned for appropriation of \$59,100 for sites and annexes to Brambleton No. 1 and Atlantic City Nos. 1 and 2 schools.

W. Va., Huntington.—City will vote May 3 on \$50,000 bond issue to erect schools. Address The Mayor.

Va., Rustberg.—Falling River Magisterial District Trustees will probably issue \$30,000 of bonds to erect four schools.

THEATERS

Md., Cumberland.—Mellinger Bros. will erect theater.

Okla., Sapulpa.—Frank P. McClure, Chicago, Ill., and R. C. Strain, Pittsburg, Pa., will, it is reported, erect opera-house; 75x150 feet; cost \$50,000.

Tex., Beaumont.—Joseph Loeb, T. R. Haley, W. H. Holland and others promoting erection of theater to cost \$150,000.

Tex., Longview.—Elks lodge will erect theater, lodge and office building.

Va., Newport News.—W. F. and C. T. Crall will open bids March 24 for erection of fireproof theater at Washington Ave. and 31st St.

WAREHOUSES

La., New Orleans.—Pearl Wight purchased site 81x285 feet at Magazine and Notre Dame

Sts., adjoining property now owned; will erect six-story warehouse.

N. C., Hamlet.—W. R. Bonsal and W. R. Land are interested in erection of cotton warehouse to cost \$22,000.

N. C., Reidsville.—J. S. Phinix will erect brick warehouse.

N. C., Reidsville.—Neil & Dixon, Chatham, Va., will erect brick tobacco warehouse.

S. C., Greenville.—Charleston & Western Carolina Railway, A. W. Anderson, Augusta, Ga., general superintendent, will erect number of warehouses. (See "Railway Stations.")

S. C., Conway.—Farmers' Tobacco & Storage Warehouse Co., incorporated with \$2000 capital stock by L. H. Burroughs, S. M. Stevens and J. E. Coles.

S. C., Edgefield.—W. G. Strom, Pleasant Lane, S. C., will erect cotton warehouse recently noted; 40x100-foot structure, with metal siding and roofing.

Tenn., Chattanooga.—John C. Vance, 322 Carter St., is having plans prepared by Chas. E. Bearden, Chamberlain Bldg., Chattanooga, for warehouse previously mentioned; 75x111 feet; reinforced concrete construction; composition roof; cost \$17,000.

Tex., Dallas.—Publishing Board of Methodist Episcopal Church South, W. C. Everett, local manager, will erect warehouse for storing books; brick; frontage, 50 feet; four stories.

Tex., Galveston.—Selden-Breck Construction Co., Fullerton Bldg., St. Louis, Mo., is reported as having contract to build cotton warehouse.

BUILDING CONTRACTS AWARDED

APARTMENT-HOUSES

Tex., Dallas.—Mrs. C. Joline awarded contract to L. R. Wright, Dallas, Tex., to erect apartment and store building; three stories and basement; cost \$35,000; plans by Hubbell & Greene, Dallas, Tex.

Tex., Galveston.—Dr. J. O. Dyer awarded contract to Charles Scheleva, Galveston, for erection of apartment-house recently noted; cost \$10,000; size, 52x72 feet; cement veneer; reinforced-concrete basement.

BANK AND OFFICE BUILDINGS

Ga., Savannah.—Central of Georgia Railway, C. K. Lawrence, chief engineer, awarded contract to H. O. Young of Savannah to erect addition to Red Office Bldg. on West Broad St.; addition to be 150 feet long and cost about \$45,000.

Ky., Lovelaceville.—Citizens' Bank awarded contract to Bank Construction & Supply Co., Louisville, Ky., to supply plans and erect \$2500 bank structure; J. W. Rice, Morehead, Ky., represents contractors. (See "Machinery Wanted.")

Md., Baltimore.—Baltimore County Water Co., 411 East Baltimore St., awarded contract to Henry S. Rippel, 7 Clay St., Baltimore, for erection of office building recently noted; two stories; 44x72 feet; ordinary construction; tin roof; steam heat; electric lighting; cost \$15,000; plans by owner.

Miss., Greenwood.—A. McC. Kimbrough awarded contract for erection of office on Fulton St.; construction begun.

Tenn., Knoxville.—S. R. Miller and G. O. Bicknell awarded contract to Claborn & Brooks of Knoxville to erect Cherokee Office Bldg.; three stories and basement; red pressed brick trimmed in Tennessee marble and light-gray brick; first floor will contain 12 offices; second, 14 offices, and third to be occupied by Knoxville Business College; lavatories to have tiled floors; lobby to have 7½-foot marble wainscoting; estimated cost \$12,000; plans by Gredig & Lynn of Knoxville.

Tex., Dublin.—Dublin National Bank awarded contract to J. P. Cook, Comanche, Tex., to erect \$25,000 bank building.

W. Va., Princeton.—Princeton Guarantee & Title Co., S. V. Straley, manager, awarded contract to C. F. Austin, Princeton, for erection of bank, store and office building recently noted; three stories; 66x87 feet; ordinary construction; hot-water heat; electric lighting; passenger electric elevator; plans by A. F. Wynong, Princeton. (See "Machinery Wanted.")

CHURCHES

Ala., Montgomery.—F. H. Kohn & Son, 16 Commerce St., awarded contract to Graves & Estes of Montgomery to erect edifice for St. Andrew's Catholic congregation; building will be 46x100 feet; ordinary construction; brick; sandstone trimmings; tile roof; esti-

mated cost, \$12,000; plans by J. J. Gaffney, Louisville, Ky.; Rt. Rev. Edward P. Allen, Mobile, Ala., is bishop of diocese. (Recently mentioned.)

Ga., Savannah.—Little Sisters of Poor awarded contract to E. Morgan, Newport News, Va., at about \$20,000 to erect chapel on property bounded by Abercorn, 37th, Lincoln and 36th sts.; structure is to be 48x88 feet; brick and stone; slate roof; gothic architecture; interior to be arched; contract does not include heating and lighting, which will increase cost to about \$25,000; plans by Henry Urban of Savannah.

Md., Baltimore.—Otterbein Memorial United Church, C. C. Gohen, pastor, awarded contract to Gladfelter & Chambers, 2072 Woodberry Ave., Baltimore, to erect addition to edifice at Roland and Fifth Aves.; ordinary construction; steam heat; electric lighting; plans by M. R. Rhodes, Chambersburg, Pa.; estimated cost \$20,000. (Recently mentioned.)

S. C., Eastover.—Baptist Church has plans by Wilson, Sampayrac & Urquhart, Columbia, S. C., for edifice; brick; stoves; cost \$6000; contract recently noted awarded to F. D. McNulty, Columbia.

Tex., El Paso.—First Church of Christ, Scientist, awarded contract to King Worley of El Paso to erect edifice at Montana and Stanton Sts.; 48x80 feet; height, 25 feet; electric and gas lighting; steam heat; cost \$10,000.

W. Va., Middlebourne.—Methodist Church awarded contract at about \$7000 to Robert Carpenter, Sistersville, W. Va., to erect edifice; plans by W. J. Alexander, New Martinsville, W. Va.

COURTHOUSES

Tex., Anson.—Jones County Commissioners awarded contract to Texas Construction Co., Fort Worth, Tex., for erection of courthouse previously noted; three stories and basement; brick and stone; cost \$85,500; plans by Elmer G. Withers, Stamford, Tex.

DWELLINGS

Ala., Eufaula.—S. V. De Trinnis will erect residence; frame; electric lighting; cost \$3000; George H. Wyde, architect and contractor, Eufaula.

D. C., Washington.—Edson Briggs awarded contract to R. C. Hiss, Washington, for erection of two dwellings at 634-636 South Carolina Ave.; two stories; brick; cost \$8000; plans by C. E. Webb, Warder Bldg., Washington.

Fla., Tampa.—Sanchez & Hays Real Estate Co. awarded contract to Hard Construction Co. for erection of 28 dwellings; 20x51 feet; reinforced concrete construction (Kahn system); cost \$42,000. (Recently noted under Ybor, City.)

Md., Baltimore.—John M. Miers awarded contract to Frank Novak, 2800 Jefferson St., Baltimore, for erection of five dwellings on Oliver St., near Lakewood Ave.; two stories; brick; 13x50 feet; cost \$7000; plans by Joseph Hirt, 2800 Jefferson St., Baltimore.

Md., Baltimore.—S. S. Mertz awarded contract to Henry S. Rippel, 7 Clay St., Baltimore, for erection of proposed dwelling; two stories; frame; cost \$8000; plans by Clyde N. Friz, 11 East Pleasant St., Baltimore. (See "Machinery Wanted.")

Md., Baltimore.—John S. Gittings, North and Fayette Sts., awarded contract for remodeling Ashburton homestead on Brown's lane; improvement to include erection of eight additional rooms.

Md., Baltimore.—Lizzie L. Randolph awarded contract to John S. Moke, 1825 West Baltimore St., Baltimore, for erection of residence at 1025 Edmondson Ave.; three stories; 18x67 feet; electric lighting; tin roof; hot-water heat; cost \$5000; plans by Jacob F. Gerwig, 210 East Lexington St., Baltimore.

Md., Baltimore.—Rochester-Kirkness Realty Co., Section O, Wholesale Market, has plans by and awarded contract to Joseph Spence, 2319 Orleans St., Baltimore, for erection of 13 two-story dwellings on Potomac St., near Baltimore St., to cost \$20,800 (recently mentioned), and for 27 two-story dwellings and one store building on Hare St., near Baltimore St., to cost \$35,000.

Md., Baltimore.—Rochester-Kirkness Realty Co., Section O, Wholesale Market, has plans by and awarded contract to Joseph Spence, 2319 Orleans St., Baltimore, for store building on Hare St. (See "Dwellings.")

Miss., Laurel.—J. H. Cook awarded contract to W. M. Norris, Laurel, for residence; veneered pressed brick; eight rooms.

N. C., Winston-Salem.—J. F. Ange will erect residence; two stories; frame; shingle roof; construction by owner.

N. C., Winston-Salem.—A. F. Sams awarded

ed contract to J. F. Ange, Winston-Salem, for residence; two stories; frame; cost \$3000; size 25x58 feet; plans by Hall Crews, Winston-Salem.

N. C., Winston-Salem.—F. A. Moore awarded contract to J. F. Ange, Winston-Salem, for erection of dwelling; shingle roof; two stories; frame; size 40x50 feet; electric lighting; cost \$3000; plans by W. C. Northrup, Winston-Salem.

Tenn., Morristown.—First Baptist Church will erect parsonage; 10 rooms; ordinary construction; electric lighting; heating not decided; cost \$4000; Coy Willing, architect and contractor, Morristown.

Tex., Bastrop.—R. J. Brieger awarded contract for erection of cottage.

Tex., Bastrop.—Mrs. Mary Hasler awarded contract for erection of residence.

Tex., Center.—E. E. Leak awarded contract for erection of residence to replace burned structure.

Tex., San Angelo.—C. H. Powell awarded contract to Joe Chann, San Angelo, for erection of dwelling recently noted; two stories; brick; fireproof construction; hot-water heat; gas or electric lighting; cost \$15,000; plans by R. E. Scott, San Angelo; material contracted for.

Tex., Taylor.—C. V. Compton will expend \$10,000 to erect dwelling recently noted; electric lighting; construction by owners.

Va., Lynchburg.—F. S. Kirkpatrick has plans by Reed & Stem, 7 East 42d St., New York, for residence; brick; slate roof; two stories and basement; 10 rooms; cost \$15,000; McLaughlin, Pettit & Johnson, Lynchburg, will superintend construction.

Va., Norfolk.—J. H. Sammons awarded contract to Dear & Totty, Norfolk, for erection of two residences; brick; cost \$10,300.

Va., Norfolk.—C. W. Cowper awarded contract for erection of two-story frame dwelling; cost \$2500.

GOVERNMENT AND STATE BUILDINGS

Okla., Vinita.—Asylum.—State Board of Public Affairs awarded contract to J. E. Gibson Construction Co., Tulsa, Okla., at \$123,797 to erect buildings Nos. 1 and 2 at Eastern Insane Asylum; each structure is to be 180x40 feet, with wings 35 feet; P. H. Weathers, Guthrie, Okla., is State architect; Charles W. Dawson, Muskogee, Okla., furnished plans and specifications. (Recently mentioned.)

HOTELS

N. C., Durham.—F. J. Parrish awarded contract to O. F. Wilkerson of Durham to erect hotel; three stories; brick; contain 40 rooms, with overhead bridge connecting with 16 rooms over arcade stores; lobby to have tiled floor; steam heat.

Tex., Brownwood.—Southern Hotel Co. awarded contract to Hood & Staags, Brownwood, for erection of hotel previously noted; plans by Waller, Shaw & Fields, Fort Worth, Tex.; cost within \$100,000.

Tex., Brownwood.—Southern Hotel Co. awarded contract at \$80,000 to Hood & Staags of Brownwood to erect hotel; four stories; contain 100 rooms.

Va., Harrisonburg.—James R. Lupton purchased Massanetta Springs for \$13,000 and awarded subcontracts for erection of hotel; brick structure with metal roof; 100 rooms; 198x73 feet; partly two, partly three stories; hot-water heat; fireplaces; electric lighting; cost within \$35,000; plans by J. W. Allman, Harrisonburg.

Va., Norfolk.—Atlantic Holding Co. will expend about \$25,000 in improvements to hotel, including 12 additional bathrooms, new system of plumbing by means of which hot and cold water can be obtained in each of 102 rooms, etc.; Henry C. Miller has contract for plumbing and J. H. Pierce (both of Norfolk) for brick work and carpentry; F. W. Calvert is manager of hotel.

W. Va., Roncverre.—Roncverre Hotel Co., W. H. Felix, manager, will rebuild hotel recently reported burned; 50x125 feet; mill construction; steam heat; electric lighting; cost \$5000; D. C. Howard, Roncverre, architect and contractor.

MISCELLANEOUS STRUCTURES

Ala., Bay Minette.—Store.—A. Jack Hamilton will erect store for Baldwin Hardware Co.; brick; 50x39 feet; construction begun.

Ark., Heber.—Jail.—Cleburne County awarded contract at \$9000 to R. R. Brown, Heber, for erection of jail previously mentioned; 32x40 feet; brick; concrete foundation; first floor to contain jailor's home; second floor,

two toolproof cells; cost about \$4000; plans by F. W. Gibbs, Little Rock, Ark.

Ala., Marion.—Masonic Temple.—Temple Lodge, No. 425, Marion Chapter, No. 12, will expend \$7000 to erect Masonic lodge building; 54x50 feet; ordinary construction; electric lighting; plans by James H. Hopson, Selma, Ala.; contract recently noted awarded to Woodfin & Harmon, Marion.

Ala., Montgomery.—Business.—L. L. Hill awarded contract to James Hodgson, Montgomery, for erection of business building; three stories; brick; cost \$11,000.

Ark., Little Rock.—Store.—A. Arnold awarded contract to Schmelzer & Schay, Little Rock, for erection of store building; three stories; brick; cost \$15,000.

Ark., Russellville.—Store.—Jess Martin awarded contract to Boswell, Frammer & Scarlett, Russellville, for erection of two-story brick store building; 50x30 feet; plate-glass front.

D. C., Washington.—Store.—J. F. Darcey & Co., 3120 M St. N. W., awarded contract to C. H. Darcey, 2916 Olive Ave. N. W., Washington, for erection of store at 3140 M St.; four stories; 25x30 feet; front largely glass.

D. C., Washington.—Store.—I. Kirkstone awarded contract to J. T. Jones, 122 O St. N. W., Washington, for erection of three stores at 2151-2155 P St. N. W.; one story; brick; cost \$6000; plans by Julius Wenig, 1223 F St. N. W., Washington.

Md., Baltimore.—Stable.—William J. Tickner & Sons, 421-423 West Camden St., are having plans prepared by Haskell & Barnes, 407 Wilson Bldg., Baltimore, for stable at North and Fulton Aves.; 30x77 feet; two stories; brick; cost \$4500; awarded contract to George Bunnecke & Son, 305 St. Paul St., Baltimore.

Md., Baltimore.—Clubhouse.—Baltimore Club, Charles and Madison Sts., awarded contract to John Cowan, 106 West Madison St., Baltimore, for improvements to clubhouse; will remodel building in rear of main structure; first floor to be leased for automobile showroom to Pierce-Arrow Automobile Co., and connect two structures by bridge; cost \$4000; plans by Ellicott & Emmart, Union Trust Bldg., Baltimore.

Md., Baltimore.—Store and Flat.—H. R. Eisenbrandt & Son, Charles and Lexington Sts., have plans by John R. Forsythe, 232 St. Paul St., Baltimore, for store and flat building at 228-230 North Howard St.; four stories; 30x91 feet; cost \$22,000; construction under supervision of owner. (Recently mentioned.)

Miss., Greenwood.—Store.—A. McC. Kimbrough awarded contract for erection of two store buildings.

N. C., Charlotte.—R. H. Jordan & Co. has plans by and awarded contract to H. M. Wade Manufacturing Co., Charlotte, for erection of store building recently noted; 40x60 feet; ordinary construction; brick; cost \$10,000.

N. C., Winston-Salem.—Store and Office.—E. B. Jones awarded contract to J. F. Ange, Winston-Salem, for erection of store and office building; three stories; brick; slag roof; cost \$8000; structure to be 25x30 feet; mill construction; electric lighting; heating not decided; plans by W. C. Northrup, Winston-Salem.

Okla., Enid.—Business.—Frank Van Frank and Napoleon Peard awarded contract to Clarke & Hardin, Enid, for erection of double business building; two stories; cost \$10,000.

S. C., Camden.—Store.—Mrs. E. F. Watkins awarded contract to Mr. Adams, Camden, for erection of two-story store.

Tenn., Lebanon.—Business.—N. Robertson and J. J. Askew awarded contract to Richards & Frazier, Lebanon, to erect business building for Hill Produce Co.; 25x60 feet; two stories and basement; cost \$5000; plans by J. L. Richards, Lebanon.

Tex., Beaumont.—Business.—B. Deutser awarded contract to Thomas & Weber, Beaumont, for erection of business building; 100x60 feet; cost \$5000.

Tex., Brownwood.—Business Building.—Brooke Smith reported to award contract to Al Morton for erection of 10-room business building.

Tex., Brownsville.—Business.—P. J. Vivier awarded contract for erection of business building; two stories; foundation to permit erection of three additional stories; 96x100 feet; cost \$25,000.

Tex., Houston.—Hospital.—Southern Pacific Company, Thornwell Fay, general manager, Houston, awarded contract to F. A. Jones Building Co., Houston, for erection of proposed hospital; cost \$200,000.

Tex., Marble Falls.—Stores.—H. T. Ellison awarded contract to L. McCleary, Marble

Falls, for erection of three stores recently noted; 30x100 feet; stone and concrete; electric lighting; cost \$8000.

Tex., Seguin.—Business.—Abe B. Freeman awarded contract to Adolph Mueller, New Braunfels, Tex., for erection of business building; two stories; cost \$10,000.

Tex., Snyder.—Sanitarium.—A. O. Scarborough will erect sanitarium; three stories; pressed brick; construction begun.

Tex., Thornton.—Store.—H. F. McDonald awarded contract to W. E. Collins, Corpus Christi, Tex., for rebuilding store building recently noted; two stories; 32x60 feet; concrete block and brick; gas lighting; cost \$3000.

Va., Richmond.—Exhibition.—National Association of Piano Dealers of America, E. H. Droop, president, 923-25 Pennsylvania Ave. N. W., Washington, D. C., awarded contract for remodeling interior of Horseshow Bldg.; improvements to include erection of 60 sound-proof exhibit-rooms and 100 exhibit booths; cost \$20,000.

RAILWAY STATIONS

Ark., Argenta.—St. Louis Southwestern Railway, M. L. Lynch, chief engineer, Tyler, Tex., has, it is reported, awarded contract for erection of freight depot to cost \$40,000 and passenger station to cost \$50,000.

S. C., Greenville.—Jamison & Morris of Greenville have contract at \$37,789.90 for erection of passenger and freight depots for Charleston & Western Carolina Railway; A. W. Anderson, Augusta, Ga., general superintendent; passenger station will be of pressed brick and have slate roof; freight depot will be two stories high, second floor to be used for offices; company will also erect number of warehouses. (Previously mentioned.)

SCHOOLS

Ala., Birmingham.—City awarded contract at \$19,805 to Charles W. Hall, Birmingham, for erection of addition to Barker Elementary School; eight rooms; plans by D. A. Helmich, 453 Hood Bldg., Birmingham. (Recently mentioned.)

Okla., Oklahoma City.—Trustees of M. E. Church South, A. C. Enoch, president, recently noted to begin construction of college buildings, will erect administration building and five dormitories to cost within \$300,000; Smith & Parr, architect, Oklahoma City; construction by building committee.

Md., Baltimore.—Sisters of Notre Dame, Charles-street Ave. Ext., awarded contract to Edward Brady & Son, 1109-1113 Cathedral St., Baltimore, for erection of additional building, to be connected with present structure by tunnel; 175x179 feet; three stories; basement of Port Deposit granite; upper stories tapestry brick, gray canyon sandstone trimmings; Spanish tile roof; contract also includes addition to economy building to provide for additional power equipment; cost \$250,000; plans by Thomas C. Kennedy, 516 Law Bldg., Baltimore. (Recently mentioned.)

Okla., Lawton.—Department of Interior, Washington, D. C., awarded contract to McHenry-Beatty Company, East Liverpool, O., for erection of school recently noted; 62x86 feet; fireproof and mill construction; steam heat; cost \$46,155; plans by Eugene M. Sunderland, Washington, D. C. (See "Machinery Wanted.")

Tex., Groveton.—Groveton Independent School District awarded contract at \$29,279 to W. A. Norris, Crockett, Tex., for erection of school, and at \$983.25 to W. C. Hixson Company, Dallas, for heating plant; structure will be mission type; 71 feet 11 inches by 71 feet 11 inches; faced with No. 1 repressed brick; limestone trimming; asbestos slate roof; electric lights; plans by A. O. Watson, Austin, Tex.; contracts for seats awarded at \$1681.50 to Texas Seating Co.; plumbing and wiring contracts not yet awarded.

Tex., Mexia.—City awarded contract at \$10,000 to C. W. Fuqua, Dallas, Tex., for erection of proposed school.

THEATERS

Fla., De Land.—C. O. Codrington awarded contract for erection of brick theater.

WAREHOUSES

Ga., Elberton.—Elberton Cotton & Compress Co. awarded contract to Elberton Brick Co. to erect cotton warehouse; 100x130 feet; contain 12,000 square feet floor space; capacity, about 1000 bales cotton.

Tex., Houston.—A. H. Bartell awarded contract to Hughes & Etie of Houston to erect warehouse; three stories; mill construction; 50x100 feet.

Tex., Stamford.—C. H. Cox Company, Waco, Tex., awarded contract to J. D. Stonehacker, Waco, for erection of warehouse recently noted; 54x136 feet; ordinary construction; cost \$8500; plans by W. C. Dobson, Waco.

Va., Holland.—Holland Supply Corporation had plans prepared by and awarded contract to E. C. Smith for erection of feed, peanut and fertilizer warehouse; ordinary construction; 48x100 feet; cost \$3000.

RAILROAD CONSTRUCTION

RAILWAYS

Ala., Cullman.—The Cullman Coal & Coke Co. telegraphs the Manufacturers' Record that its railroad has not been sold "and never will be." This denies the press dispatch saying that the Louisville & Nashville Railroad had bought it. W. L. Mapother, vice-president of the latter, is quoted as also denying the report, saying that the Louisville & Nashville laid tracks at the expense of the Cullman Company, but beyond this there are no relations present or prospective between them.

Ark., Douglas.—The Little Rock, Maumelle & Western Railway is reported to have completed an extension from Douglas to Maumelle, Ark., five miles.

Ark., Huttig.—A dispatch says that work will begin soon on an extension on the Louisiana & Pine Bluff Railway from Dollar Junction to a point near Champagnolle, about 22 miles. Grading has been done for about five miles and survey beyond is completed. W. H. Lee is chief engineer at Huttig, Ark.

Fla., Crystal River.—The Joseph Dixon Crucible Co., Jersey City, N. J., says that the report of plans to build a railroad from Crystal River to Brooksville, Fla., is old, but it may result in something some day. C. E. Herrick of Crystal River may be addressed for further information.

Fla., Live Oak.—An officer of the Florida Railway Co. is reported as saying that contracts are let to the Florida Construction & Realty Co., Jacksonville, Fla., for the contemplated extension from Live Oak eastward to Jacksonville, and thence northward to Fernandina, 100 miles. Four steel bridges, besides docks, shops and stations, will also be erected. Frank Drew, Live Oak, Fla., is president of the road.

Fla., Ocala.—The Ocala & Southwestern Railroad Co. is to build 21 miles from Ocala to Dunellon, Fla. One small bridge over the Blue Spring River. About 14 miles have been constructed. W. H. Jones is contractor. The officers are Walter Ray, president and general manager; W. B. Johnson, treasurer; D. A. Clark, secretary, all at Martel, Fla.

Ga., Albany.—The Albany & Northern Railway has been transferred to the Georgia Southwestern & Gulf Railway Co., which purchased it, and it is expected that plans for the extension from Albany, Ga., to St. Andrews Bay, Fla., on the Gulf of Mexico, will soon be announced. W. M. Legg is vice-president and general manager at Albany, Ga.

Ga., Albany.—The Albany & Northern Railway has been transferred to the Georgia Southwestern & Gulf Railway Co., which bought it, and the latter announces that it will be extended immediately about 155 miles to St. Andrews, Fla., on the Gulf of Mexico. W. M. Legg is president and general manager at Albany, Ga. T. J. Shingler is vice-president, and H. J. Bruton, secretary and treasurer.

Ga., Atlanta.—The Southern Railway Co., it is reported, will spend \$50,000 to strengthen bridges between Atlanta and Macon. W. H. Wells is chief engineer of construction at Washington, D. C.

Ga., Columbus.—The Columbus Power Co., according to a press report, is surveying for a railroad from Motts, Ala., to Goat Rock, on the Chattahoochee River, about 15 miles north of Columbus, to build a railroad five or six miles long to haul material for a proposed dam. It will connect with the Central of Georgia. B. H. Hardaway of Columbus, it is reported, has the contract for the road.

Ga., Fitzgerald.—W. A. Heller, secretary, writes the Manufacturers' Record giving the officers of the Jacksonville & Atlanta Short Line Railway elected March 10, thus: B. B. Gray of Pinebloom, Ga., president; T. B. Ragan, Hawkinsville, Ga., and M. W. Garbutt, Fitzgerald, Ga., vice-president; C. A. Holtzendorff, Fitzgerald, Ga., treasurer; Mr. Heller, as noted, is secretary; the assistant secretaries are J. N. King, Rochelle, Ga.; H. E. Conates, Hawkinsville, Ga.; R. G. Dickerson, Homerville, Ga.; L. C. Holtzen-

dorff, Valdosta, Ga., and J. W. Strange, Ocala, Ga.; D. B. Jay of Fitzgerald, Ga., is general counsel. Others interested as directors are: Elmer P. Morris and S. Tilden Holtzendorff, both of New York; F. B. Sirmans of Sirmans, Ga.; J. E. Mercer of Fitzgerald, Ga.; J. C. Luke of Ocala, Ga.; D. B. Ware of Fitzgerald, Ga.; George F. McCranie and B. G. Oberly, both of Willacoochee, Ga.; W. R. Bowen and E. K. Farmer, of Fitzgerald, Ga., and O. N. Harper of Lox, Ga. The board of control is S. Tilden Holtzendorff, B. B. Gray, Elmer P. Morris, T. B. Ragan and F. B. Sirmans. The proposed line is 210 miles long, from Jacksonville, Fla., to Fort Valley, Ga., via Homerville, Willacoochee, Ocala, Fitzgerald, Hawkinsville and Perry.

Ga., Griffin.—The Griffin City & Interurban Railway Co. has applied for a charter and will build in Griffin alone five miles of line. The incorporators are C. M. Preston and A. D. Alkin of Macon, Ga., with others of Griffin, Ga.

Ga., Lincolnton.—T. H. Verdel, Elberton, Ga., informs the Manufacturers' Record that the Augusta, Lincolnton & Northern Railway Co. has not yet been organized, but he is in charge as engineer. The proposed route is 100 miles from Augusta to Danielsville, Ga., via Lincolnton and Tignall. Survey is not yet made, but engineers will take the field at once. It is not yet decided when bids for construction will be opened.

Ga., Toccoa.—A letter to the Manufacturers' Record says that a company will be organized this month to build a steam railroad from Toccoa to Carnesville, Ga., 20 miles, via Mize and Red Hill. The necessary money is subscribed and surveys made. Contract will be let soon. Contractors and others can address W. S. Erwin at Clarksville, Ga. J. H. Hicks and Emory Hunnicut, also of Clarksville, are interested.

Ky., Elizabethtown.—J. D. Richardson & Son, White Mills, Ky., advise the Manufacturers' Record of a proposition to build an electric railway from Elizabethtown to Bowling Green, Ky., via Cecelia, Stephensburg, White Mills, Millerstown and Mammoth Cave. Electricity will be generated by water-power.

La., Cottonport.—The Frost-Johnson Company is reported to have purchased timberlands of the W. T. Joyce Company in Catahoula and Winn parishes, including 80 miles of railroad, which will probably be extended.

La., Cottonport.—The Gulf, Delta & Northwestern Railroad Co. has filed a charter to build from Cottonport to connect with the Colorado Southern, New Orleans & Pacific Railway, and also to extend from Cottonport north and south. The incorporators are O. H. Williams, Wm. T. McElroy, E. E. Overstreet, W. B. Tschanner and J. C. Lachlin.

La., Kinder.—The Kinder & Northwestern Railroad Co. has filed charter to build its contemplated line from Kinder northwest, extending at will; capital \$100,000. The directors are: A. J. Peavy, president; Robert J. Wilson, vice-president; Ernest H. Payne, secretary; George H. Byrnes, treasurer, and Randolph Krause.

La., Napoleonville.—Franchises reported granted by the Police Jury to J. B. Martin of Assumption parish and associates for a motor-car railroad along the Bayou Lafourche between Lockport and Donaldsonville; construction to begin within a year.

La., Opelousas.—The Avoyelles, Palmetto & Gulf Railway Co. stockholders at a recent meeting received reports that survey is completed, maps and profiles nearly completed, more than 80 per cent. of right-of-way given, and elections are to be held immediately to vote on aid for the road. Hollier & Naff of Opelousas are the engineers.

La., Tioga.—The Tioga & Southeastern Railroad is reported complete and open for freight from Tioga northwest to Viola, La., 15 miles.

Md., Baltimore.—A bill has been introduced in the Legislature to incorporate the English Consul Estate, Landsdowne & Baltimore Railway Co.; capital \$100,000; to build a line from Baltimore via Westport to Landsdowne and other points. The incorporators are James Rittenhouse, Henry J. Emerich, S. Newton Robinson, Jr., Charles H. Werner, W. Elmer King, Ernest E. Robinson and Charles J. Hull.

Md., Brandywine.—The Washington, Potomac & Chesapeake Railway Co. has filed incorporation papers with the Secretary of State at Annapolis, Md., to complete its line from Mechanicsville through St. Mary's county; the line is now 21 miles long, and the only difference in the new name is the change of the word railroad to railway; Henry W. Watson, Franklin Bank Bldg., Philadelphia, Pa., is president, and others

interested with him are Wm. Shippen Roney and Albert R. Roney of Philadelphia, and S. Johnson Poe and Edgar Allan Poe of Baltimore; the capital is \$500,000.

Md., Frederick.—The Baltimore & Ohio Railroad, according to a dispatch quoting President Daniel Willard, will build a new freight depot at Frederick and improve the passenger station. A. M. Kinsman is chief engineer at Baltimore, Md.

Md., Hagerstown.—The Western Maryland Railroad Co. has submitted plans to the citizens' committee showing its proposed new depot, to cost from \$60,000 to \$70,000. H. R. Pratt is chief engineer at Baltimore, Md.

Md., Hagerstown.—The Cumberland Valley Railroad, according to a report quoting an officer, expects to spend about \$500,000 in improvements at Hagerstown, including a new station, a new roundhouse, a repair shop and elevation of tracks. G. C. Kuhns is engineer at Chambersburg, Pa.

Miss., Columbia.—C. W. Goodyear, president of the New Orleans Great Northern Railroad, is quoted as saying that survey will be made from Columbia to Hattiesburg, Miss., for a contemplated extension. N. G. Pearsall is general manager at Bogalusa, La.

Miss., Meridian.—Application of the Memphis, Pensacola & Northwestern Railroad Co. for a charter has been approved, according to a dispatch from Jackson; the proposed line in Mississippi is from Plum Point, on the Tennessee boundary, southeast to Meridian; thence to a point on the Alabama boundary near Pine Ridge, Miss., and from there to Pensacola, Fla. It is proposed to begin construction within 60 days after organizing and to complete the line in 20 months. The incorporators are: J. M. Dockery, George F. Newhardt, H. T. Bruce, Dr. B. G. Henning, A. Goodman, S. W. Jones, J. E. Scaife, D. S. Rice and M. J. Roach, all of Memphis, Tenn.; Wm. Dockery of Dockery, Miss., and E. Craig of Chicago, Ill. Mr. Roach is a railroad contractor. The line will be 35 miles long.

Mo., Joplin.—Franklin Smith of Pittsburg, Pa., and Joplin, Mo., is reported to have financed the proposed Oklahoma, Kansas & Missouri Interurban Railway to connect Joplin with Miami and Bartlesville, Okla., 15 miles; it is expected to begin construction within a month, and the line will be completed first to Miami.

Mo., Mexico.—The Chicago, Burlington & Quincy Railroad is reported surveying between Mexico and Kansas City, Mo., for a contemplated low-grade line between the two points. R. W. Willis is district engineer at St. Louis, Mo.

Mo., St. Louis.—The Manufacturers' Railway of St. Louis has increased its capital to \$5,000,000, and, according to a dispatch, bonds will be issued for its extensive terminal plans, including a union depot. G. F. Moore is president and general manager.

Mo., St. Louis.—An officer of the Missouri Pacific Railway says that the company does not intend to build an elevated line in St. Louis. This denies a recent press report.

Mo., St. Louis.—Geo. F. Moore, president of the Manufacturers' Railway of St. Louis, is quoted as saying that the proposed new Southwestern line, in which this road was reported interested, will be constructed either by his company or by Jos. Ramsey, Jr., formerly president of the Wabash Railroad, and Malcolm Niven of New York, who are promoting the St. Louis & Pacific Railway, to run from St. Louis to Fort Smith, Ark., about 210 miles. In either event the Manufacturers' Railway will be used for terminals.

N. C., Fayetteville.—R. C. Hoffman & Co. of Baltimore, Southern sales agents for the Maryland Steel Co., announce that they have contract with President J. A. Mills of the Raleigh & Southport Railroad for 4500 tons of 60-pound rails for the extension from Fayetteville to Clarkson, N. C., 45 miles, on which construction will begin immediately, financial arrangements having been provided.

N. C., Jefferson.—T. C. Bowie advises the Manufacturers' Record that the railroad plan in which he is interested is for a line from Abingdon, Va., including the existing Virginia-Carolina Railway and the proposed Ashe County Railroad from a connection with the former to Wilkesboro, N. C., and there connecting with a line from Charlotte via Newton to Taylorsville, N. C. A report from Knoxville, Tenn., says that W. E. Mingea, president of the Virginia-Carolina Railway, has conferred with Rutledge Smith of Cookeville, Tenn., with reference to an extension to Bristol, Tenn., and Charlotte, N. C., and also for connection with the proposed Tennessee, Alabama & Kentucky Railroad from Chattanooga to Louisville, projected by Mr. Smith.

N. C., Lumberton.—The Virginia & Carolina Southern Railway is reported to have begun work with a gang of 90 convicts on its extension from St. Paul to Elizabethtown, N. C., about 30 miles.

N. C., Mount Airy.—The Surry-Stokes-Rockingham Development Co. is reported to have engaged McGhee & Royer of Roanoke, Va., to survey 15 miles of its proposed railway between Draper, N. C., and Stoneville, connecting at the latter point with the Roanoke & Southern.

N. C., Newbern.—The Neuse-Trent Traction Co. of Newbern has been incorporated with authorized capital from \$300 to \$500,000. The incorporators are C. L. Stevens, W. G. Gilbert and H. I. Crumpler, all of Newbern.

N. C., Statesville.—The Statesville Air Line Railroad Co. has applied to the County Commissioners to issue \$50,000 of 5 per cent. bonds, which were voted to aid in building the line, and an order was made accordingly. Construction is expected to begin soon. W. D. Turner of Statesville, N. C., is president. He confirms the statement that bonds are authorized, to run 30 years; work will begin this spring; line is from Statesville to Mt. Airy, 64 miles, via Turnersburg, Harmony, Housherville, Yadkinville, Boonville and Dobson; one large bridge over the Yadkin and several small; D. M. Ansley is general manager. After this line is completed, another may be built from Statesville to Lincolnton, 30 miles, and a third from Mount Airy to Radford, Va., 65 miles.

N. C., Webster.—The Jackson Railroad Co. has been chartered to build 18 miles of line from Sylvia, N. C., on the Southern Railway, to Tackasee, in Jackson county; authorized capital stock, \$200,000. C. J. Harris, T. A. Cox, C. C. Cowan and others are interested.

Okla., Altus.—Material is reported received for building track on the completed grade of the Altus, Wichita Falls & Hollis Railroad from Altus to Hollis, 35 miles. J. A. Kemp, Wichita Falls, Tex., is president. He says that the line will be altogether 60 miles long from Altus to Wellington, Tex., of which 45 miles will be in Oklahoma and 15 miles in Texas, the latter being chartered as the Wichita Falls & Wellington Railway. It is expected to complete all within six months.

Okla., Cornish.—Thos. J. Dulaney confirms report that \$15,000 bonus has been raised for the first railroad which will build to Cornish.

Okla., Enid.—The Enid, Ochiltree & Western Railroad Co., incorporated some time ago in Texas, has also secured an Oklahoma charter and will build about 500 miles of line from the Texas boundary, in Oklahoma, reaching principal points. The incorporators are B. H. Tallmadge, L. W. Lyons, W. H. Greer, E. W. Waite and Hamlin Palmer. The officers are: B. H. Tallmadge, president; W. H. Greer, L. W. Lyons and George M. Perry, vice-president; W. B. Harrison, secretary, and Hamlin Palmer, assistant secretary.

Okla., Geary.—S. M. Porter of Caney, Kans., president of the Cherryvale, Oklahoma & Texas Railway Co., says that the proposed lines will be 30 miles long. One will connect Caney, Kans., with Geary, Okla., and another will be from Caney to Fayetteville, Ark. The country is generally level. The officers are S. M. Porter, president; vice-president, Reuben Guibay, 16 Place Vendome, Paris, France; treasurer, R. E. Wade, Perry, Okla.; general manager, J. H. Brewster, Independence, Kans.; chief engineer, B. J. Dalton, Lawrence, Kans.; secretaries, A. W. Shuiths, Independence, Kans., and J. V. de Raymond, 16 Place Vendome, Paris, France. The American directors are S. M. Porter, J. H. Brewster, F. D. Brewster, Geo. A. Masters and R. E. Wade.

Okla., Lawton.—Track-laying is reported begun on the Lawton & Fort Hill Electric Railway, and the grading will be completed as rapidly as possible. Simon Smith is president.

Okla., Loveland.—Contract is reported signed by the Red River Valley & Texas Railway Co. and the Loveland Commercial Club for the line to run from Ardmore westward via Walters, Loveland and Mercer, Okla., to Chillicothe, Tex., 120 miles, grading to begin at Loveland March 15. Construction is reported already begun at Mercer. F. L. Mercer, Ardmore, Okla., is president and general manager.

Okla., Muskogee.—J. W. Mattox, one of the incorporators of the Eastern Oklahoma Traction Co., Muskogee, Okla., writes that the proposed lines as reported will be altogether 251 miles long, connecting Muskogee with Oklahoma City and other points, as described; several bridges will be required; at present the construction of only 84 miles is being arranged. The other incorporators are H. B. Spaulding, R. N. Eggleston, J. B.

Furry, John Hall, W. L. Tulle and Gray Bournan.

Okl., Muskogee.—The lengths of the various electric lines to be built by the Eastern Oklahoma Traction Co., just chartered with \$100,000 capital, are thus: Muskogee to Tulsa, 48 miles, with a branch to Wagoner, 9 miles; Wagoner to the Grand River, 10 miles; Muskogee to Checotah, 21 miles; Muskogee to Okmulgee, 39 miles; Okmulgee to Oklahoma City, 87 miles; total, 251 miles, and estimated cost, \$26,000 per mile. The directors are H. B. Spaulding, B. N. Egleston, J. W. Mattox and others, all of Muskogee, as heretofore reported.

Okl., Oklahoma City.—The Gulf & Northwestern Railway Co. is reported being organized in Kansas to build a line from Oklahoma City through the western part of Kansas, via Liberal, and thence to coal fields at Sterling, in the northern part of Colorado, with branches to other points, including one in Nebraska; headquarters at Goodland, Kan. The incorporators are: J. B. Dyatt, John A. Keenan, C. C. Evans and J. F. Kimmel, Goodland; J. W. Tibbles, Dresden; James A. Sprague, Selden, and R. B. Ketchum, Canon City, Col.

Okl., Shawnee.—An official of the Shawnee Electric Railway Co. is quoted as saying that a subcontract for grading has been let to the Davis Construction Co. The Shawnee Railway Construction Co. is the general contractor. Grades 1½ per cent. and curves 3 degrees, maximum. Two steel bridges over the Canadian River required. C. F. Edwards is president and A. Hardgrave chief engineer, both at Shawnee, Okla.

Okl., Sulphur.—Sulphur has raised a bonus of \$70,000, according to a dispatch, which will be held for the benefit of the first interurban railway to build there.

Okl., Walters.—E. A. Bourne of Comanche, Okla., and Edgar E. Poe of Loco, Okla., are reported working on plans to secure a railroad from Ardmore, via Walters, and Loco to Frederick, Okla.

S. C., Greenville.—Contract is reported let to Jameson & Morris of Greenville for new passenger and freight depots of the Charleston & Western Carolina Railway (Atlantic Coast Line) in Greenville, the amount of contract being \$37,789.90. Passenger depot on McBee Ave. and freight depot on McBee Ave. and Mordecai St.

S. C., Greenville.—Charter has been granted to the Greenville, Spartanburg & Anderson Railway Co. to build its proposed electric road to connect the three points named; capital from \$300,000 to \$2,000,000. The route is from Belton, the terminus of the Anderson Railway, via Williamston, Pelzer, Piedmont, Gantt, Greenville, Taylor, Greer, Pelham, Duncan, Reidsville, Wellford, Fairforest, Lockhart and Spartan Mills to Spartanburg, S. C., 65 miles. At present it will be built only to Greenville, but eventually to Spartanburg, and thence returning via Union, Laurens and Greenwood to Belton. J. B. Duke, B. N. Duke and Geo. W. Watts, all of New York, have subscribed for \$110,000 of stock, J. B. Duke for \$70,000 and the others for \$20,000 each. The directors are W. J. Thackston, president and treasurer, Greenville, S. C.; J. R. Vandiver, vice-president, Anderson, S. C.; J. B. Duke, New York; W. S. Lee, Charlotte, S. C.; E. A. Smyth, Lewis W. Parker and H. J. Haynesworth, all of Greenville; D. P. McBrayer and J. D. Hammett, both of Anderson; J. P. Gossett of Williamston, S. C., and A. W. Smith of Spartanburg, S. C. T. F. Hill of Anderson is secretary. Among others interested as large stockholders are Thomas F. Parker of Greenville, S. C.; E. W. Robertson of Columbia, S. C.; A. G. Furman and J. I. Westervelt, both of Greenville. Headquarters at Greenville. T. B. Lee of Charlotte is completing the preliminary survey.

S. C., Orangeburg.—The Orangeburg Railway Co., capital \$50,000 to \$300,000, is the name of the corporation chartered by W. C. Wolfe and J. A. Berry of Orangeburg and Lawrence Manning of Camden, S. C., to build an electric railroad 30 miles long from Orangeburg to Springfield, S. C. It is also contemplated to extend to Columbia, Charleston and Augusta. The Edisto Power Co. was also incorporated by the same parties.

Tenn., Athens.—The Tellico Railway, according to a press report, has been purchased by the Louisville & Nashville Railroad, and an extension may be built from Athens, Tenn. O. R. Brigham is general manager of the Tellico Railway at Athens, Tenn.

Tenn., Memphis.—The Tennessee Traction Co., George E. Bushnell, manager, is reported to have begun survey for its proposed line between Memphis and Jackson, Tenn. W. K. Burton of Memphis is president.

Tex., Aransas Pass.—One of the incorporators confirms the report that the Aransas

Terminal Railroad Co. has been incorporated to build a line from a point on the San Antonio & Aransas Pass Railway to Deep Water on Harbor Island, about seven miles, including about one of trestle and one 40-foot drawbridge. E. O. Burton and A. H. Danforth of San Antonio, Tex., are prominently interested with others.

Tex., Brownwood.—A letter to the Manufacturers' Record says that grading contracts for the first 20 miles of the Brownwood North & South Railway between Brownwood and May, Tex., 25 miles, has been awarded to the Texas Building Co. of Fort Worth, Tex.

Tex., Brownwood.—R. A. Love, president, writes that the Brownwood Southwestern Railway Co. is to build 30 miles from Brownwood via Trickham, Whon and Rockwood to the Colorado River. The route is mostly level. Directors are R. A. Love, president; Brooke Smith, vice-president and treasurer; H. T. Love, secretary and general superintendent, and B. E. Hurlburt, all at Brownwood, Tex.; E. W. Gill, Whon, Tex.; A. J. Eilers and John T. Smith of Austin, Tex. Another letter says that A. B. Carson, chief engineer, has begun survey, and it quotes President Love as saying that construction contract will be let within 30 days.

Tex., Coleman.—An officer writes that the Texas North & South Railway Co. proposes to build 360 miles from Seymour, via Coleman, to San Antonio, Tex. The directors are L. E. Collins, president; C. F. Dumas, treasurer; W. N. Cameron, vice-president; W. H. Stephens, secretary; W. J. Coulson, J. C. Di-brell, J. E. Boog Scott and J. A. B. Miller.

Tex., Greenville.—A preliminary organization is reported for a traction company to build an interurban railway from Greenville to Wolfe City, 21 miles. The Mayor of Greenville may be able to give information.

Tex., Greenville.—Charter has been filed for the Eastern Texas Traction Co. to build line from Greenville to Wolfe City, provision being included for extension later to Bonham, Denison, Honey Grove, Paris, Cooper, Clarksville, Dallas, Plano, Chisholm and Forney, Tex.; capital \$12,000. The incorporators are J. H. Blocker, J. B. Murphy, H. E. Vaughan, W. M. McBride, H. C. Tittsworth and others.

Tex., Hereford.—A dispatch says that a company will be incorporated at Hereford to build a railroad to connect with the Rock Island system, and that \$30,000 have been subscribed. The Mayor may be able to give information.

Tex., Hearne.—The Hearne & Brazos Valley Railway, according to a dispatch, may be extended. E. B. Cushing, construction engineer for the Southern Pacific lines, at Houston, Tex., is reported to have made preliminary survey; J. W. Green is general manager at Hearne, Tex.

Tex., Houston.—Thornwell Fay, vice-president of the Galveston, Harrisburg & San Antonio Railway (Southern Pacific system) is quoted as saying that it is contemplated to build a general emergency hospital for the company and also improve terminals in Houston with a nine-story office building. A. V. Kellogg is engineer at Houston, Tex.

Tex., Houston.—Mark Lowd, local manager for the Stone & Webster Engineering Corporation of Boston is quoted as saying that bids for construction of the Houston-Galveston Electric Interurban Railway will not be opened until March 18. Plans are in the hands of contractors. A dispatch from Boston says that \$2,750,000 of 5 per cent. bonds are being offered for sale to build the road. Construction bids will be received until noon on the above date for 16 miles of grading and fencing, etc., from Clear Creek to a point two miles south of Texas City Junction, near Galveston. J. B. Townsend is superintendent of construction at 410 First National Bank Bldg., Houston, Tex.

Tex., Kingsville.—The stockholders of the St. Louis, Brownsville & Mexico Railroad have approved the new issue of \$25,000,000 of bonds; also the contemplated extension of the Tres Palacios branch to Collegeport; also contemplated improvements to line and shops, etc., to cost about \$700,000. E. C. Burgess is engineer at Kingsville, Tex.

Tex., Laredo.—A press dispatch says that contract for the new bridge over the Rio Grande for the National Lines of Mexico has been let to the Bancara Obras de Bienes Rices of Mexico City. It will be of steel and reinforced concrete. J. M. Reid is chief engineer at Mexico City.

Tex., North Galveston.—Joseph H. Eagle of Houston, Tex., is reported to have purchased the townsite of North Galveston and contemplates building a railroad from there to Dickinson or League City.

Tex., Ochiltree.—A press report quotes an

officer of the Enid, Ochiltree & Western Railway Co. as saying that the Panhandle Construction Co. of New York has the contract and is represented by Fred L. Brant, manager and assistant treasurer, at Dalhart, Tex. Work is in progress from Ochiltree westward to Dalhart, 111 miles, via Hansford, Jarvis, Parksdale and Dumas. About four miles of track laid on main line; also connections at Dalhart with the Rock Island and with the Fort Worth & Denver City Railway. Maximum grade one-half of 1 per cent., curves 3 degrees. Shops and other buildings to be erected at each terminal. Extension contemplated from Ochiltree, Tex., to Enid, Okla.

Tex., San Antonio.—George W. Nock, chairman of the San Antonio, Brownsville & Tampico Railroad, according to a dispatch, has financed the line and 100 men are now grading between Jourdan and Hinds, while another force of 100 is to be put on the work soon.

Tex., San Marcos.—B. G. Neighbors advises the Manufacturers' Record that a company has not yet been organized to build the proposed railroad from San Marcos to Luling, Tex.

Tex., Taylor.—An officer of the International & Great Northern Railroad says that the yard construction at Taylor, Tex., will be simply a remodeling of the present yard and no new construction will be necessary. O. H. Crittenden is chief engineer at Palestine, Tex.

Tex., Temple.—W. J. McDaniel, chief engineer of the Temple & Northwestern Railway, is reported to have opened offices in the Willcox Bldg., on Avenue A, and the contractors will have their grading outfit on the line within a few days. It is proposed to build from Temple to Hamilton and Comanche, 100 miles. H. W. Peck of Dallas, Tex., is general attorney.

Tex., Wichita Falls.—A dispatch says that the Fort Worth & Denver City Railway and the Wichita Falls & Northwestern Railway have agreed to build a joint passenger station between 8th and 9th Sts., and the train shed will extend to 7th St.; estimated cost, \$200,000. R. C. Gowdy is chief engineer of the former at Fort Worth and R. A. Thompson of the latter at Wichita Falls, Tex.

Va., Cape Charles.—An officer of the New York, Philadelphia & Norfolk Railroad Co. confirms the report that shops will be built at Cape Charles for locomotive repairs. They will include power plant, smith shop, oil-house, machine shop, erecting shop and roundhouse. Total cost, without equipment, \$125,000. John W. Ferguson of Paterson, N. J., is the contractor.

Va., Damascus.—The Harris Construction Co. is reported, has contract for extension of the Virginia-Carolina Railway, which may be continued to Jefferson and Wilkesboro. N. C. W. E. Minge is president at Abingdon, Va.

Va., Elkton.—A dispatch says that surveys are being made from Elkton, the eastern terminus of the Chesapeake Western Railway, through Madison, Green and Orange counties, and will be continued to some point on tide-water. W. E. D. Stokes, president and general manager of the Chesapeake Western, 73d St. and Broadway, New York, may be able to give information.

Va., Roanoke.—Contract reported let to the Lidgerwood Manufacturing Co. of New York to build the proposed Mill Mountain Incline Railroad. Cost from \$30,000 for line to \$46,000 complete.

W. Va., Beckley.—Clark & Krebs, Charleston, W. Va., are making a survey for the Blue Jay Lumber Co. for an extension of the Fat Creek Branch of the Raleigh & Pocahontas Railway 1½ miles to develop timber lands.

W. Va., Morgantown.—The Sabraton Railway Co., now owned by H. R. Warfield, will be transferred to the Union Utilities Co. At present two miles of line are to be built from South Sabraton to Dellslow, W. Va., via Richard and Rock Forge, including one wooden bridge with stone piers. The country is rough and rolling. Construction will be done by the company's forces and will be begun about May 1.

W. Va., Sistersville.—T. Moore Jackson of Clarksburg, W. Va., is reported promoting a trolley line from Sistersville to Middlebourne and New Martinsville, W. Va.

STREET RAILWAYS

Ark., Pine Bluff.—The Citizens' Light & Transit Co. is reported, intends to build several extensions. J. F. Rutherford is president.

Miss., Meridan.—H. L. Doherty & Co., 60 Wall St., New York, are reported to have acquired control of the Meridian Light &

Railway Co., and improvements and extensions are expected. A. B. Patterson is manager of the company at Meridian, Miss.

N. C., Concord.—W. A. Foll, contractor, is reported as saying that he will resume construction March 14 on the Piedmont Railway and have cars running in Concord within four months.

Okl., Wilburton.—The Citizens' Street Railway Co. of Wilburton has been chartered to build an interurban line from Wilburton to Paterson and Lutie, 10 miles; capital \$1,000,000. The incorporators are James M. Connell, Richard Howard, Benjamin Mills, Elias M. Cooper and William Powers, all of Wilburton.

Tex., San Antonio.—The San Antonio Traction Co. is reported to have signed contract to build an extension of 1½ miles to Knob Hill, Dilworth and Green Terrace.

MACHINERY, PROPOSALS AND SUPPLIES WANTED

Manufacturers and others in need of machinery or supplies of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery or supplies needed we will make their wants known free of cost, and in this way secure the attention of manufacturers and dealers throughout the country. The Manufacturers' Record has received during the week the following particulars as to machinery and supplies wanted.

Angle Irons.—See "Building Materials."

Asphalt.—Emil Zerkowicz, Hungarian Commercial Councillor, 49 Exchange Pl., New York, wants addresses of manufacturers of elastic black asphalt, such as used for insulating (Bergman) tubes surrounding cable wires.

Banking Screens.—See "Screens."

Boats.—Hoisting Machinery Co., 50 Church St., New York, wants to correspond with manufacturers of wooden scows; will build three scows 60 feet long, 15 feet wide, about 4 feet deep, of yellow pine timber. (Prefer to place order with builder near Wellsburg, W. Va.)

Boiler and Engine.—Huggins & Williams, Morristown, Tenn., will buy boiler and engine for flour mill of 50 barrels capacity.

Boiler.—Whitted Woodwork Manufacturing Co., W. G. Pearson, president, Durham, N. C., wants boiler.

Boiler.—See "Engine and Boiler."

Boiler.—Queen City Gin Co., J. N. Swift, manager, Gadsden, Ala., wants prices on 40-horse-power boiler.

Boilers.—W. C. Tucker, Hotel Touraine, Big Stone Gap, Va., will later purchase boilers. (See "Sawmills.")

Boilers.—W. H. Hendricks, 10 South 21st St., Richmond, Va., wants prices on boilers.

Boilers.—J. B. Harvie, Roxboro, N. C., wants prices on boilers.

Bridge Construction.—E. M. Hubert, secretary Police Jury, Gretna, La., will open bids June 1 for construction of steel bridge across Harvey canal in Jefferson parish; for further information address Mr. Hubert.

Bridge Construction.—Bids will be received by Board of Revenue of Jefferson County, Birmingham, on following bridges, until March 18: One 80-foot steel span, with 120-foot approach, over Village Creek at Porter, Ala.; one 70-foot span over Black Creek; one 80-foot span over Shoal Creek; one 40-foot span over Cunningham Creek; all bids must be accompanied by \$300 certified check. For plans and specifications apply to J. W. Gwin, County Engineer, Room 103, Courthouse, Birmingham, Ala.

Bridge Material.—E. O. Burton of Aransas Terminal Railroad Co., San Antonio, Tex., wants prices on bridge material.

Briquetting Machinery.—Chas. Phillips, Box 235, Lake Charles, La., wants addresses of manufacturers of briquetting machinery.

Bronze.—Anderson Granite Construction Co., C. J. Beauchamp, president, Anderson, S. C., wants prices on bronze.

Building Materials.—J. S. Starr, Rock Hill, S. C., wants prices on building materials, including steel I-beams, angle irons, sandstone, granite, plate glass, prism lights, composition roof, etc.

Building Materials.—McHenry-Beatty Company, East Liverpool, O., wants prices on

red slate roofing and Indiana limestone; also plumbing.

Building Materials.—W. H. Hendricks, 10 South 21st St., Richmond, Va., wants information and prices on copper or iron fireproof windows; stairs of fireproof material; also marble, slate, etc., for decoration of large factory building.

Building Materials.—W. C. Hargrove, care of First National Bank, Pittsburg, Tex., wants prices on building materials, including tile and slate roofing; tile for mantels, bathrooms, outside galleries, bathroom fixtures, etc.; stone or manufactured columns; millwork, inside finish, hardwood floors, etc.; also plumbing.

Building Material.—Henry S. Rippel, 7 Clay St., Baltimore, Md., wants prices on general building material.

Building Material.—Union National Bank, Union City, Tenn., wants prices on building materials.

Building Materials.—Grier & Park, Greenwood, S. C., want prices on building materials.

Building Materials.—L. F. Dickson, Mayor, Opelika, Ala., wants prices on roofing, doors, etc., for two-story wholesale store building.

Building Materials.—Princeton Guaranty & Title Co., S. V. Straley, manager, Princeton, W. Va., wants prices on red and speckled buff pressed brick, iron beams, roofing, floor tiling and plate glass.

Canning Machinery.—Rice Bros. Packing Co., Apalachicola, Fla., wants equipment for oyster-canning factory.

Cars.—Pennsylvania Equipment Co., 201 West End Trust Bldg., Broad St. and South Penn Square, Philadelphia, Pa., wants, for delivery in New York, for export shipment, 40 to 50 flat cars, 36-inch gauge.

Cars.—Wanted: Standard-gauge dump cars; send price, particulars and location to Richard Peters, Jr., purchasing agent, Birmingham Coal & Iron Co., Birmingham, Ala.

Cement.—Canton Supply Co., Canton, N. C., wants jobbers' prices on Portland cement.

Cement.—See paving item mentioning call for bids by Corey Land Co.

Cement Tiling.—See "Tiling."

Chandeliers.—First Baptist Church, Rev. M. L. Harris, pastor, Cullman, Ala., wants prices on chandeliers.

Construction Equipment.—Anderson Granite Construction Co., C. J. Beauchamp, president, Anderson, S. C., wants general construction outfit.

Coal.—Sealed proposals will be received at office of purchasing department, Panama Railroad Co., 24 State St., New York, until March 25 for furnishing all or part of 500,000 tons of semi-bituminous coal. Blanks (Circular P-273) and full information may be had upon application at above office; Wendell L. Simpson, Major, Nineteenth Infantry, U. S. A., assistant purchasing officer.

Concrete.—Lebanon Democrat, Lebanon, Tenn., wants prices on concrete for floors.

Core Drilling.—Emmett L. Moffett, president, Elon College, Elon College, N. C., wants to correspond with parties prepared to bore and investigate marble deposits.

Crane.—C. F. Hornbeck, Cranford, N. J., wants 10-ton locomotive crane (second-hand preferred).

Crate Machinery.—Merton Swift, cashier, First State Bank, Sabinal, Tex., wants to correspond with manufacturers of crate machinery.

Derrick Irons.—Missouri Stone & Construction Co., Carthage, Mo., wants set 30-ton guy derrick irons, with sheaves complete, for 20-inch square timbers; also set five-ton guy derrick irons.

Ditching Machinery.—J. M. Holloway, 771 Walnut St., Macon, Ga., wants catalogues and prices on ditching machinery.

Drainage.—Commissioners Bear Swamp Drainage District, W. J. Berryman, secretary, Edenton, N. C., will open bids March 26 for construction of canals, including one main canal and five branches, amounting to 145,000 cubic yards; bids to be given for each in detail per cubic yard and may be for any number or all of canals and be accompanied by certified check for \$1000 for main canal and \$100 for each of other five; plans, profiles, specifications and other information may be had of Patrick Matthews, chief engineer, superintendent of construction, Edenton. (Date postponed from March 8, as lately stated.)

Dredging.—Wm. H. Flaherty, Guild, Tenn., wants two to five-yard dipper dredge; also heavy bucket sand and gravel dredge; with or without hulls.

Dredging.—Department of Public Improvements, subdepartment Harbor Board, Balti-

more, Md. Proposals for dredging will be received until March 23; proposals to be addressed to Board of Awards and sent to City Register (at his office, City Hall), accompanied by certified check for \$1000. For specifications apply at Harbor Board office. O. F. Lackey, Harbor Engineer.

Drill Press.—Smith Electric Co., 17 West 5th St., Charlotte, N. C., wants prices on drill press; range $\frac{1}{4}$ to $\frac{1}{2}$ inch; horizontal or vertical; belt-driven from variable-speed motor; delivery in May.

Electric-light Plant.—Board of Affairs, care F. M. Oliver, clerk, Little Rock, Ark., will open bids March 23 for enlarging and improving electric-light plant; plans, specifications and terms of payment on file in office of city electrician.

Electric Lighting.—City of Opelika, Ala., L. F. Dickson, Mayor, will receive bids until April 15 for furnishing electric lights to city; service to begin at expiration of present contracts; right to reject all bids reserved.

Electrical Machinery.—W. C. Tucker, Hotel Touraine, Big Stone Gap, Va., will later purchase electrical machinery. (See "Sawmills.")

Electrical Machinery.—Smith Electric Co., 17 West 5th St., Charlotte, N. C., wants prices on variable-speed A. C. 60-cycle motor; three-phase; 115 volts; $\frac{1}{4}$ or 1 horsepower; delivery in May.

Electrical Machinery.—J. B. Smith Co. & Dixon, Ayden, N. C., want 50 electric meters; direct current, 220 volts. (Recently incorrectly noted as "motors.")

Electrical Machinery.—Hodges Bros. & Co., Brookhaven, Miss., want motor power for 110-volt alternating current. (See "Refrigerating Machinery.")

Electrical Machinery.—Whitted Woodwork Manufacturing Co., W. G. Pearson, president, Durham, N. C., wants 10 or 15-horsepower motor.

Elevators.—Summers-Parrott Hardware Co., 104 Main St., Johnson City, Tenn., wants two electric freight elevators; be direct connected; 110-volt three-phase 60-cycle current; cars to be 8x9, with 2500 pounds capacity, equipped with automatic gates and of simple operating construction; for four-story-and-basement building, 7 $\frac{1}{2}$ feet from basement floor to roof; personal visits of representatives not desired.

Elevator.—Rutledge Holmes, Jacksonville, Fla., wants second-hand elevator (hand-power).

Elevators.—Princeton Guaranty & Title Co., S. V. Straley, manager, Princeton, W. Va., wants prices on electric elevators.

Elevators.—W. H. Hendricks, 10 South 21st St., Richmond, Va., wants prices on elevators.

Elevator.—Holland Supply Co., Holland, Va., wants freight elevator; hand power; 2000 pounds capacity.

Engine.—Clarence Cosby, Richmond, Va., wants 100-horsepower Corliss engine.

Engines.—O. R. Whitney, 39 Cortlandt St., New York, wants for prompt delivery second-hand cross-compound Corliss or vertical Corliss engine, to deliver 3000 horse-power under pressure of 100 or 120 pounds steam; also 225-horse-power second-hand automatic engine, immediate delivery, steam pressure 130 pounds; give description and prices.

Engines.—J. B. Harvie, Roxboro, N. C., wants prices on engines.

Engines.—See "Oil Engines."

Engine.—See "Boiler and Engine."

Engine.—Leach Towing Co., Washington, N. C., wants 50 or 60-horse-power marine, oil or gasoline engine for tugboat.

Engine.—Queen City Gin Co., J. N. Swift, manager, Gadsden, Ala., wants prices on 25-horse-power engine.

Engine and Boiler.—F. M. Flournoy, Brickyard, Ala., wants prices on 50-horse-power engine and boiler.

Engines.—W. C. Tucker, Hotel Touraine, Big Stone Gap, Va., will later purchase engines. (See "Sawmills.")

Fiber-bucket Machinery.—R. E. Piper, Durham, N. C., wants data and prices on fiber water-bucket machinery.

Fire-alarm System.—City of Yorkum, Tex., will install fire-alarm system. Address D. J. Shall, Alderman.

Gasoline Engine.—See "Engine."

Gasoline Launches, etc.—Bids will be received at office of General Purchasing Officer, Isthmian Canal Commission, Washington, D. C., until April 5 for furnishing gasoline launches, boiler-feed pumps, steel, boiler tubes, chain, bolts, etc. Blanks and general information relating to Circular No. 567 may be obtained at above office or office

of assistant purchasing agents, 24 State St., New York; 65 National Realty Bldg., New Orleans; 1086 North Point St., San Francisco, Cal.; also from U. S. Engineer office in following cities: Seattle, Wash.; Los Angeles, Cal.; Baltimore, Philadelphia, Pittsburg, Boston, Buffalo, Cleveland, Cincinnati, St. Paul, Detroit, Milwaukee, Chicago, St. Louis, Chattanooga, Louisville, Mobile and Galveston; Commercial Club, Kansas City; Chamber of Commerce, Quincy, Ill., and Chamber of Commerce and Board of Trade, Tacoma, Wash.; F. C. Boggs, Captain, Corps of Engineers, U. S. A., General Purchasing Officer.

Gasoline Engine.—J. W. Willis, Route 3, Sylvester, Ga., wants 5 or 6 horse-power gasoline engine.

Glass.—See "Building Materials."

Glass.—See "Building Materials."

Gasoline Engine.—Southern Equipment Co., 19 Young St., Houston, Tex., in market for 25-horse-power gasoline engine.

Grading, etc.—Proposals will be received until March 18, noon, for clearing, grubbing, grading and fencing about 16 miles of road-bed for Galveston-Houston Electric Railway, extending from Clear Creek to two miles south of Texas City Junction, in Galveston county. Certified check in sum of \$1000 must accompany each bid. Right reserved to reject bids. Plans and specifications can be seen at offices of Stone & Webster Engineering Corporation, J. B. Townsend, superintendent of construction, 410 First National Bank Bldg., Houston, Tex.

Granite, etc.—Anderson Granite Construction Co., C. J. Beauchamp, president, Anderson, S. C., wants prices on granite and marble.

Handle Machinery.—Julian Field, Atlanta, Ga., wants to correspond with manufacturers of handle machinery.

Heating Plant.—First Baptist Church, Rev. M. L. Harris, Cullman, Ala., wants prices on steam-heating outfit.

Heating Plant.—Grier & Park, Greenwood, S. C., wants prices on heating plant.

Heating Plant.—Princeton Guaranty & Title Co., S. V. Straley, manager, Princeton, W. Va., wants prices on hot-water heating plant for \$25,000 bank, store and office building.

Heating Plant.—W. C. Hargrove, care of First National Bank, Pittsburg, Tex., wants prices on steam or hot-water heating plant.

Heating Plant.—McHenry-Beatty Company, East Liverpool, O., wants prices on heating plant.

Heating Plants.—W. H. Hendricks, 10 South 21st St., Richmond, Va., wants prices on heating apparatus for factory building.

Heating Plant.—First Baptist Church (W. C. Hale), Morristown, Tenn., wants prices on steam or hot water heating plant.

Heating Plant.—William J. O'Brennan, Belvedere Ave., Mt. Washington, Md., wants prices on hot water heating plant for 11-room cottage.

Hoisting Engine.—Wise Granite Co., Wise, N. C., wants 7x10 D. D. C. new or second-hand hoisting engine.

Hose.—Canton Supply Co., Canton, N. C., wants samples and jobbers' prices on garden hose.

Ice Machinery.—Glen Allan Manufacturing Co., Glen Allan, Miss., wants prices on ice machinery; has power.

Knitting Machinery.—F. M. Boyd, Chester, S. C., wants catalogues of hosiery knitting machinery.

Lathe.—Smith Electric Co., 17 West 5th St., Charlotte, N. C., wants prices on brass-working lathe for small pieces made from brass rod; delivery in May.

Levee Construction.—United Irrigation & Rice Milling Co., Crowley, La., invites bids for construction of 50,000 yards of levee work.

Lighting Fixtures.—William J. O'Brennan, Belvedere Ave., Mt. Washington, Md., wants prices on gas and electric-light fixtures.

Locomotive.—John R. Hawes, Atkinson, N. C., wants 36-inch-gauge tram engine; within five tons; new or second-hand.

Locomotive.—Joseph E. Bowen, 901 Bank of Commerce Bldg., Norfolk, Va., wants 40 to 50-ton (Shay) locomotive; standard gauge; prompt shipment.

Machine Tools.—Sanders Manufacturing Co., Rome, Ga., wants 20x60-inch iron-turning lathe, 30-inch band saw, 2-inch bolt threading machine and 26-inch drill press.

Machine Tools.—Southern Equipment Co., 19 Young St., Houston, Tex., in market for new or second-hand tools as follows: Lathe, about 48-inch swing, 10 feet between centers; lathe, about 36-inch swing, 12 feet between centers; lathe, about 18-inch swing, 8 or 9

feet between centers; lathe, about 24-inch swing, 20 feet between centers; planer, about 48-inch by 48-inch by 12-foot or 14-foot bed; radial drill press, about 4 or 4 $\frac{1}{2}$ -foot arm; upright drill press, about 36 or 40-inch arm; upright drill press, about 20 or 24-inch arm; vertical boring and turning mill, about 12 feet swing; two Dallett portable drills; twist drill grinder; medium size key-seat cutter, for pulleys and gears; horizontal milling machine, equipped to cut gears up to 15-inch diameter; steam hammer, about 1200 to 1500 pounds; horizontal boring mill, for cylinders; two boring bars for horizontal mill; two crude-oil heating furnaces; blower for furnaces; hydraulic wheel press; two blacksmith forge fires, good size; quantity of twist drills and reamers. State location, condition and dealer's price in first letter.

Marble.—See "Building Materials."

Metal Laths.—Lebanon Democrat, Lebanon, Tenn., wants prices on metal laths.

Metal-box Machinery, etc.—G. W. Martin, Cheraw, S. C., wants to correspond with manufacturers of machinery for making and engraving or stenciling galvanized steel or tin boxes.

Oil Engines.—Italian Import & Export Co., Genoa, Italy, wants addresses of manufacturers of crude-oil engines.

Oil Mill.—King Lumber & Oil Co., Unadilla, Ga., wants equipment for cottonseed-oil mill.

Oil Mill.—Samuel B. George, Lexington, S. C., wants cottonseed oil mill.

Paving.—City of Lake Charles, La., will open bids March 23 for seven miles of cement sidewalk and curb. For specifications and information address C. H. Burton, City Engineer, City Hall.

Paving.—Corey Land Co., Robt. Jemison, Jr., president, invites bids through Jemison Real Estate & Insurance Co., Birmingham, Ala., for paving, etc., in connection with industrial city—Corey; improvements to cost \$396,000. Bids as follows: Moving 186,000 cubic yards earth; 97,350 linear feet combination cement curb and gutter, 16 $\frac{1}{2}$ miles, 13,900 linear feet cement curb, 2.6 miles; 4650 square yards cement sidewalk, 20 miles; 88,477 square yards macadam street, 5 miles; 32,411 square yards paved streets, 2 miles; 2 $\frac{1}{2}$ miles storm sewers; 8 $\frac{1}{2}$ miles sanitary sewers; 20,000 barrels cement required, not including that used for streets if this class paving decided on; first contract will amount to about \$150,000; bids opened March 19 at office of engineers, Meade & Huey, Birmingham.

Paving.—Proposals for laying flat concrete sidewalk pavement, amounting to about 8000 square yards, and necessary curbing will be received until March 18 at Room 17 Leader Bldg., Manchester, Va.; specifications and bidding blanks may be had from above office; all bids to be accompanied with certified check of \$50; D. F. Laprade, City Engineer.

Paving.—Proposals will be received by Board of Affairs, Parkersburg, W. Va., until March 24 for paving Avery St. from 13th to 17th St. in accordance with plans and specifications on file in office of City Auditor or City Engineer; certified check for \$500, payable to Frank Good, Auditor, to accompany each bid; full information, specifications and blank forms for proposals may be had from City Engineer or City Auditor.

Paving.—City of Dothan, Ala., will receive proposals for constructing 210,000 square feet of sidewalks and 36,000 linear feet of curb and gutters until March 21; bids will be considered on Schilling and hexagon block pavement, and combination concrete curb and gutter, or granite curb with brick gutter; plans and profiles may be seen at office of G. S. Mickle, City Engineer, and specifications may be had by addressing City Engineer or R. W. Lisenby, City Clerk; certified check of \$2000 with each bid; Joe Baker, Mayor; R. W. Lisenby, Clerk.

Piping.—See "Terra-cotta Pipe."

Planer.—Missouri Stone & Construction Co., Carthage, Mo., wants 36-inch or 42x36-inch by 12-foot second-hand open-side planer.

Planer.—W. H. Cooper, Norwood, Ga., wants new or second-hand planer.

Pianos, etc.—Parham Bros. Supply Co., Henderson, N. C., wants to correspond with manufacturers of medium and low-priced organs and pianos.

Plumbing.—See "Building Materials."

Plumbing.—See "Building Materials."

Power-plant Equipment.—Quick Meal Stove Co., Louis Stockstrom, manager, 827 Chouteau Ave., St. Louis, Mo., will open bids June 1 for machinery, including engines, boilers, generators, motors and heaters.

Pump.—Carolina Bagging Co., Henderson, N. C., wants underwriters' steam fire pump, 750 to 1000 gallons capacity.

Pump.—Town of Houma, La., will receive sealed bids on steam double-acting underwriter duplex fire pump; for specifications address D. Angers, Clerk.

Pump.—Chickashaw Asphalt Co., T. W. Garbutt, president, Ardmore, Okla., wants one water pump, four-inch suction, three-inch discharge.

Rails.—E. F. Craven, Box 77, Greensboro, N. C., wants prices on one mile 40 to 45-pound relaying rail.

Rails.—L. F. Hobbs, Box 483, Norfolk, Va., wants 14 miles 41 relayers, 70 pounds to the yard, delivered Savannah, Ga.

Rails, etc.—Missouri Stone & Construction Co., Carthage, Mo., wants 1000 feet 60-pound second-hand rail and plates.

Rails.—Joseph E. Bowen, 901 Bank of Commerce Bldg., Norfolk, Va., wants 1500 tons 60-pound relaying steel rails for Jacksonville (Fla.) delivery.

Rails.—Pennsylvania Equipment Co., 201 West End Trust Bldg., Broad St. and South Penn Square, Philadelphia, Pa., wants, for delivery in New York, for export trade, 500 to 1000 tons 45-pound relaying rails.

Rails, etc.—J. H. Blake, Rowesville, S. C., wants eight miles 56-pound relays; also 18 frogs and switches.

Rails.—Jos. E. Bowen, 901 Bank of Commerce Bldg., Norfolk, Va., wants 500 tons 40 to 50-pound relaying steel rails; immediate shipment.

Refining Pans.—Chickashaw Asphalt Co., T. W. Garbutt, president, Ardmore, Okla., wants eight refining pans; specifications to be applied for.

Refrigerating Machinery.—Hodges Bros. & Co., Brookhaven, Miss., want cold-storage equipment for meat market; 12 bays capacity; motor power.

Road Construction.—City of Lake Charles, La., will open bids March 28 for construction of about seven miles sidewalk and curb; C. H. Burton, City Engineer, will mail specifications to contractors on request.

Road Construction.—Wake County Commissioners, F. W. Allen, chairman, Raleigh, N. C., will open bids April 4 for grading and macadamizing Willardsville road; certified check, \$150; plans, specifications and profile can be seen at Register of Deeds Office, Durham, N. C.

Road Construction.—Bids will be received by Board of Revenue, Montgomery, Ala., until March 21 for regrelaying 12 miles of Woodley and Mt. Meigs Rds. and for grading and graveling two miles of road; specifications on file in office of County Engineer J. T. Bullen.

Roofing.—See "Building Materials."

Roofing.—See "Building Materials."

Safe, etc.—Citizens' Savings & Trust Co., Norfolk, Va., wants price on safe, vault and bank fixtures.

Safe, etc.—J. J. Allman, president Merchants and Farmers' Bank, Como, Tex., wants prices on safe, vault and bank fixtures.

Safe.—Bank of Enoree, J. Y. Bryson, president, Enoree, S. C., will buy safe.

Safes, etc.—J. W. Rice, Morehead, Ky., wants prices on safes, vaults and bank fixtures.

Safes, etc.—J. B. Wadsworth, Gadsden, Ala., wants prices on bank fixtures, vaults, safes, etc.

Safes, etc.—L. E. Mumford Banking Co., L. E. Mumford, president, Cape Charles, Va., wants prices on safes and vaults.

Saw Blades.—Quarries Club, Box 302, Carthage, Mo., wants to correspond with manufacturers of straightened saw blades relative to placing orders for about 150,000 pounds.

Saw Gangs.—Missouri Stone & Construction Co., Carthage, Mo., wants two extra wide saw gangs; all steel construction (Patch or Lincoln preferred).

Sawmills.—W. C. Tucker, Hotel Touraine, Big Stone Gap, Va., in market for sawmills. (He is superintendent for Wisconsin Steel Co., subsidiary to International Harvester Co., Michigan Ave. and Harrison St., Chicago, Ill.)

Screens.—People's Building & Investment Co., Charleston, S. C., will open proposals April 5 for banking screens for building under construction; plans and specifications will be furnished by Thompson & Frohling, architects, 114 East 28th St., New York.

Seating.—First Baptist Church, Rev. M. L. Harris, Pastor, Cullman, Ala., wants prices on seating.

Sewers.—See paving item mentioning call for bids by Corey Land Co.

Sewer Construction.—Office Commissioners, District of Columbia. Proposals will be

received until March 28 for construction of sewers in District of Columbia; forms of proposals, specifications and necessary information may be obtained from chief clerk, Engineer Department, Room 427, District Bldg., Washington, D. C.; Cuno H. Rudolph, John A. Johnston, Wm. V. Judson, Commissioners, District of Columbia.

Sewer Construction.—Bob Parman, City Clerk, Oklahoma City, Okla., will open bids March 28 for construction of sewerage-purification plant or septic plant; will also open separate bids on same date for construction of lateral sewer in Block 1, Riley's Meadow Garden Addition; plans and specifications on file in office of City Clerk; each bid to be accompanied by certified check for 3 per cent. of bid.

Steam Shovel.—Wanted: Second-hand steam shovel, 1½ to 1¾-yard dipper. Send price, particulars and location to Richard Peters, Jr., purchasing agent Birmingham Coal & Iron Co., Brown-Marx Bldg., Birmingham, Ala.

Steel Beams.—See "Building Materials."

Steel.—E. O. Burton of Aransas Terminal Railroad Co., San Antonio, Tex., wants prices on steel.

Steel Roofing.—Lebanon Democrat, Lebanon, Tenn., wants prices on steel roofing material.

Steel Trays.—Asheboro Wheelbarrow & Manufacturing Co., Asheboro, N. C., in market for one or more carloads steel wheelbarrow trays; yearly contract contemplated.

Stenciling Machinery.—See "Metal-box Machinery, etc."

Stump Pullers.—J. M. Holloway, 771 Walnut St., Macon, Ga., wants catalogues and prices on stump pullers.

Vaults.—See "Safes, etc."

Vault, etc.—Princeton Guaranty & Title Co., S. V. Straley, manager, Princeton, W. Va., wants prices on vaults and vault doors.

Terra-cotta Pipe.—Canton Supply Co., Canton, N. C., wants jobbers' prices on terra-cotta pipe.

Ties.—E. O. Burton of Aransas Terminal Railroad Co., San Antonio, Tex., wants prices on ties.

Tiling.—Anderson Granite Construction Co., C. J. Beauchamp, president, Anderson, S. C., wants prices on cement and mosaic tiling.

Tobacco Machinery.—J. B. Harvie, Roxboro, N. C., wants prices on tobacco redrying machines.

Vaults.—See "Safes, etc."

Watchman's Clocks.—J. R. Young Fertilizer Co., Citizens' Bank Bldg., Norfolk, Va., wants addresses of manufacturers of clocks for recording laborers' time.

Water System.—U. S. Engineer Office, Cincinnati, O. Sealed proposals for furnishing and installing water system at dam No. 37, Ohio River, will be received until March 28; information on application; J. G. Warren, Lieutenant-Colonel, Engineers.

Water-power Plants.—W. Lauder, Yoakum, Tex., wants data on turbine water-power plants.

Water-works.—Light and Water Commission, Henryetta, Okla., postponed date of opening bids from March 15, as lately stated, to March 23 for construction of steel stand-pipe 22 feet in diameter by 50 feet high, building earth dam 35 feet high, installation of two 500-gallon power pumps, etc.; Granbery Jackson, Nashville, Tenn., is consulting engineer; W. E. Harlan, resident engineer. (Further particulars recently mentioned.)

Water-works.—Proposals will be received by M. M. Thompson, Mayor, and Board of Aldermen, Benoit, Miss., until April 5 for erecting system of water-works, including well; certified check, \$1000; plans and specifications on file with Town Clerk A. Leveck.

Water-works.—City of Sherman, Tex., Barney C. Kreager, City Secretary, will open bids April 4 for improvement and extension of water-works; cost \$12,000; P. C. Thurmond, City Engineer.

Water-works.—Crowell Water Supply Co., M. F. Crowell, manager, Crowell, Tex., will want prices on gasoline engines and pumps, piping, standpipe or reservoir for gravity water system.

Water-works.—City of Opelika, Ala., L. F. Dickson, Mayor, will receive bids until April 15 for furnishing water to city; service to begin at expiration of present contracts; rights to reject all bids reserved.

Well-Drilling Machinery.—J. M. Holloway, 771 Walnut St., Macon, Ga., wants catalogues and prices on well-drilling machinery.

Well Drilling.—John C. Kay, Graham, Tex., wants to correspond relative to drilling 2000 or 2500-foot well for gas, oil and water;

contractors furnished with log of first 400 feet.

Wheels.—B. F. Williams, Agent American Insurance Co., Lehigh, Okla., wants addresses of implement-wheel manufacturers.

Wire Fencing.—Narrows Cemetery Co., Narrows, Va., wants catalogues and prices on wire for enclosing cemetery. Address B. T. Johnson, Jr.

Windmills.—Forest City Land & Lumber Co., Hollandale, Miss., wants addresses of windmill manufacturers.

Wire-fence Manufacturers.—S. B. Dayton, 471 Boundary St., Savannah, Ga., wants to interest manufacturers in new barb-wire fence made from scrap materials.

INDUSTRIAL NEWS OF INTEREST

To Deal in Provisions.

M. H. Goodwin of Thomasville, Ga., contemplates establishing brokerage offices to deal in provisions, hay, grain, flour, etc. He is desirous of corresponding with dealers, especially those handling feedstuff and flour.

With McDonald & Nickle, Engineers.

F. H. Nickle has resigned his position as engineer for the Pennsylvania Salt Manufacturing Co., Wyandotte, Mich., and will specialize in salt plant engineering and evaporating apparatus. Mr. Nickle is associated with McDonald & Nickle, Detroit, Mich.

Aetna Engineering Bureau.

The Aetna Engineering Bureau, consulting engineer, 125 La Salle St., Chicago, has been retained to prepare plans for about \$150,000 of public-improvements at Morris, Ill. This bureau has completed plans for a \$100,000 sewer system and disposal plant at Glen Ellyn, Ill.

Patent Attorney Establishes Office.

William F. Mahoney, patent attorney, announces that he has established offices at 1820 Park Rd. N. W., Washington, D. C., and will act as attorney and counsellor in patent causes for United States and foreign patents, giving attention to patents, trademarks, designs, copyrights, etc.

With the S. Obermayer Company.

Harry Hoover, a former well-known foundry foreman, has accepted a position with the S. Obermayer Company, Cincinnati, O., manufacturer of foundry facings, supplies and equipment. Mr. Hoover will look after the interests of the Obermayer Company in Buffalo and Dunkirk, N. Y.

T. R. Hasley Invites Correspondence.

T. R. Hasley, civil engineer, now constructing dam, canal and power-house for the Menominee & Marinette Light & Traction Co. at Ingalls, Mich., will be ready to start on new work soon. Anyone contemplating the development of water-power is invited to communicate with him, as he is ready to handle other developments of a similar character to the best advantage.

The Dean Bros. Company.

The Dean Bros. Steam Pump Works, Indianapolis, Ind., continues to find business good. It is one of the companies that worked full force and full time during all of the business depression which began in the fall of 1907. During that period the company increased its manufacturing capacity by the addition of new tools, and the resumption of business activity has enabled it to fill large orders with the utmost dispatch.

Westinghouse Storage Batteries.

The Electric Storage Battery Co. of Philadelphia has acquired the patents and rights of the Westinghouse Storage Battery Co. This latter company owned all the rights of the General Storage Battery Co. and the storage-battery interests and patents of the Westinghouse Machine Co. From this time on the Electric Storage Battery Co. will have the sole right to manufacture Westinghouse batteries.

A Taplin-Rice-Clerkin Contract.

The Taplin-Rice-Clerkin Company of Akron, O., has contract for equipping the large new plant of the Alberta Clay Products Co. at Medicine Hat. This contract requires the delivery of machinery to begin within 60 days and completed in four months. The company is understood to have been in competition with all the leading manufacturers of clay-working machinery in this work.

Electric Railway & Power Plant Offered.

The properties of the Consolidated Railway & Power Co. of Fayetteville, N. C., will be

Woodworking Machinery.—"Machinery," care Manufacturers' Record, Baltimore, Md., wants planer or sticker, No. 3 baluster machine with top attachment, column-boring machine, etc.; second-hand.

Woodworking Machinery.—W. C. Tucker, superintendent Hotel Touraine, Big Stone Gap, Va., in market for woodworking machinery. (See "Sawmills.")

Woodworking Machinery.—H. L. Gray, Gainesville, Fla., wants prices on cross-arm boring machine.

Woodworking Machinery.—Cave Spring Planing Mill, Frank Wright, president, Cave Spring, Ga., wants sash and door clamp; also medium-sized modern molder.

offered at public auction on March 30. They include 130 acres of land, hydro-electric plant developing 500 horse-power, 12-mile transmission lines, street-railway system, municipal franchise for lighting, etc. For full details address N. A. Sinclair and C. W. Broadfoot, commissioners.

Buy Equipment to Increase Facilities

The A. P. Wittman Company, 112-116 North Broad St., Philadelphia, Pa., plant at Chester, Pa., has taken over equipment of the Portsmouth Forge Co., Portsmouth, N. H., and will remove such portion of the equipment as it shall require to its plant at Chester. Such machinery as will not be required will be offered for sale. The Wittman Company, to accommodate this additional equipment, is at present preparing plans for the erection of a new forge shop and an addition to its machine shop.

A Virginia Inn for Sale.

The Blue Sulphur Inn property at Cedar Bluff, Va., is offered for sale. It is located on the Clinch Valley division of the Norfolk & Western Railroad, and comprises a building with 31 large bedrooms, parlor, dining-room, office, kitchen, bathrooms, extensive porches, ample water supply from the Blue Sulphur Springs, acetylene-gas lighting plant, etc. It is claimed that this is an opportunity for satisfactory investment. The owner will sell because of a desire to retire. For particulars address E. V. Spotts, Tazewell, Va.

The Keller Manufacturing Co.

The directors of the Keller Manufacturing Co., Philadelphia, have held their annual meeting and elected Julius Keller, president; W. P. Pressinger, Wm. H. Keller and S. W. Prince, vice-presidents; Francis J. Rue, treasurer; C. S. Bell, secretary. This company has purchased the business of the W. P. Pressinger Company of New York, its general Eastern distributor and distributor for Michigan, and this territory will hereafter be handled direct by the Keller Manufacturing Co. J. J. Swan, secretary of the Pressinger Company, will be associated with the Keller Company. Charles Strador has been placed in charge of Western agencies, with offices at Chicago and Lincoln, Neb.

Will Increase Its Facilities.

Plans for the erection of a two-story brick building, 60x150 feet, have been prepared for the Schroeder Headlight Co., Morgan Ave. and Read St., Evansville, Ind., which will erect an addition to its present plant. This company has been successful in the manufacture and introduction of its oil lights, and intends to engage largely in the manufacture of electric headlights and searchlights, the latter to be a new feature of its trade. Its products are now in use in all parts of the world, and the capacity of its plant is between 700 and 800 lights per month.

Engages C. A. Greenidge, M. E.

J. G. White & Co., engineers and contractors, 43-49 Exchange Pl., New York, announce that they have engaged C. A. Greenidge, M. E., as engineer in the operating department. Mr. Greenidge was born in the Barlados, West Indies, and was educated at the Stevens Institute of Technology, graduating with the degree of M. E. in 1885. He has had wide experience in engineering work, and before his connection with J. G. White & Co. was general manager of the electrical department of the Utica Gas & Electric Co. Mr. Greenidge is a member of the American Institute of Electrical Engineers and of the National Electric Light Association.

A New Road Process.

A new road process, with Solvay granulated calcium chloride as the base, is being introduced by the Solvay Process Co., Syracuse, N. Y. This method of road treatment

is said to be a radical departure from known methods, and when the salt is applied to the road surface it is claimed to possess the qualities of extracting the water from the air to dampen and lay the dust; to retain moisture and keep the dust laid; to cement the surface of the road and protect it from water; to retain and blend enough rain water with the road material to coat the road with a new smooth surface when the rain dries away; to prevent the formation of dust, and is said to be cheaper than oil or water.

The Otis Elevators.

The elevator equipment in the Brown-Marx Bldg. at Birmingham is a subject broadly treated and illustrated in the February issue of the Indicator, published by the Otis Elevator Co. The range of this company's work is from the highest type of elevator installations for office buildings, hotels, etc., to sidewalk machines. Many notable installations in the modern buildings erected in the South during past years have been made by this company. It pays great attention to standard freight elevator equipments of all sorts, and has developed a hand-power machine which is a saver of time and money for handling material in small and in large factories and business buildings. The company will send bulletins regarding its products on application to its general offices in New York or to any of its branches in the United States, Canada and foreign countries.

Optimistic as to Coal Trade.

As one who anticipates a long period of increasing activity in the coal trade, J. Cloyd Byars, Southern manager of the Spring Coal Co., 391 Citizens' Bank Bldg., Norfolk, Va., states, in effect, that business is improving all the time, and he expects the next 10 years of the trade to be even better than the last. "There is an increase in the consumption of coal," says Mr. Byars, "on account of the decrease of the supply of wood. Doubtless natural gas and electricity may be used as a substitute for coal to a certain extent, but that will not materially affect the demand for coal. Especially is the consumption of coal increasing in the small towns. There are now towns in the Carolinas and Georgia that a few years ago were not using a ton of coal; now they are getting it to the extent of many cars a season. As to the car shortage, that is up to the railroads. I think they will have to spend millions of dollars for new equipment. The business cannot be done with the supply of cars now available."

Dodge Foreign Shipments.

A shipment of shafting, safety collars, couplings, bearings, pulleys, hangers, pillow-blocks, etc., are in readiness at the factory of the Dodge Manufacturing Co., Mishawaka, Ind., for transport to Valparaiso, Chile. These products are crated and weigh about 100,000 pounds. The material will be used in a new mill under construction for Bradon Coffee Co. A short time ago the Dodge Company shipped 11 carloads of heavy power transmission machinery to Moji, Japan, for use in the Imperial Steel Works, owned and operated by the Japanese Government. The total weight of this shipment was 343,000 pounds, including a heavy belt wheel 264 inches (22 feet) in diameter with 72-inch face, bored 25 inches to fit the main engine shaft. Other shipments have gone to Bombay, Buenos Ayres, Cape Town, Christiana, Copenhagen, Calcutta, Koko, Caracas, London, Lima, Mexico City, Montevideo, Moscow, Melbourne, Sydney, Singapore, Vienna, Valparaiso and other cities. Export trade is an important item with the Dodge Manufacturing Co.

TRADE LITERATURE.

Gas-Engine Bearings.

A booklet illustrating and describing Empire internal combustion engine bearings has been issued by the Empire Metal Co., Syracuse, N. Y. This company manufactures the Empire bearings, together with silver metal, phosphor tin, type metals, babbitt-solder, casting metals, etc.

Alumaloyd Sheets for Automobiles.

Alumaloyd sheets for automobile bodies and parts is described on a folder which is being distributed by the Stark Rolling Mill Co., Canton, O. Alumaloyd sheets are manufactured by this company and are claimed to make a perfect, lasting and rust-resisting finish for automobile bodies and parts.

The Edison Aggregate.

Presenting views of a number of modern residences constructed of Edison Portland cement, the Edison Aggregate for February has been published. This publication is

being distributed by the Edison Portland Cement Co., New Village, N. J., and should be interesting to architects, builders and owners of concrete structures.

W. N. Best's Folder.

A folder issued by W. N. Best, engineer in caloric and manufacturer of oil and tar caloric, oil and tar burners, 11 Broadway, New York, contains information relative to burning oil or tar. Mr. Best has had many years' experience in the installation of liquid-fuel burning equipment for various forms of service.

From the Fort Wayne Company.

Several timely publications are being distributed by the Fort Wayne Electric Works of Fort Wayne, Ind. They include Bulletin No. 1118 to describe and illustrate the company's type A transformer, and Bulletin No. 1119, which describes and illustrates its "Northern" type B direct-current motors. Those interested in improved electrical machinery are invited to write for these bulletins.

A Concrete Construction Bulletin.

The Monthly Bulletin No. 70, a publication issued monthly by the Universal Portland Cement Co., general offices 115 Adam St., Chicago, is being circulated for March. It contains several articles of interesting and timely information regarding the application of cement in construction, and presents views of structural work in which Universal Portland cement has been used.

Evaporation by Direct Firing System

A booklet illustrating a new type of evaporating apparatus which is said to involve several new features is being distributed. This system of evaporation is known as the McDonald & Nickle direct-firing system, and is constructed and installed by McDonald & Nickle, engineers, Detroit, Mich. The furnaces are applied directly to the first effect pan, and it is said the fire or hot gases from them never come in contact with the heating surface which is exposed to the evaporating liquor.

The Paul Pump.

An illustrated leaflet now being distributed by the Fort Wayne Engineering & Manufacturing Co. presents a description of the Paul pump. This pump is simple and efficient in operation, economical and easily attended to. It is designed for a particular purpose, and its manufacturer recommends it for individual water supply systems and for similar equipments for pumping water. The company has its offices and works at Fort Wayne, Ind., where requests for a copy of the leaflet can be sent.

Rockwell Forge Shop Furnaces.

Rockwell small-forge furnaces, operated with oil or gas, for miscellaneous work are constructed for convenience in various sizes. These forges are claimed to carry a very high welding heat, uniform throughout, and are adapted for forging, flanging, plate heating, angle bending, spring fitting, case hardening, tempering, annealing, etc. They are manufactured by the W. S. Rockwell Company, 50 Church St., New York, and are described and illustrated in catalogue No. 8 which the company has issued.

The Avery Company's Catalogue.

Among prominent manufacturers of agricultural implements is the Avery Company, main office and plant, Peoria, Ill. The products of this company embrace stalk cutters, planters, cultivators, both walkers and riders and combination riders and walkers, cultivator gangs, parts and shovels, wagons, etc., and are illustrated and described in a catalogue which the company has issued. In addition to these products the company also manufactures high-class modern traction and portable engines, threshers, steam plows and gasoline tractors, and will supply catalogues on any or all of these machines.

A Complete Electrical Supply Catalogue.

In compiling its general catalogue No. 6 the Doubleday-Hill Electric Co., 919 Liberty St., Pittsburgh, has endeavored to eliminate all obsolete material and at the same time embrace every modern device whose merits have been demonstrated. This publication contains about 800 pages, devoted to descriptive and illustrated data regarding electrical supplies and equipment, and is durably bound in cloth, making it convenient for filing and reference purposes. It embraces a number of tables of value and interest to electrical workers and others, and the tabulation is so concise and clear that information may be obtained without difficulty or waste of time. The company manufactures

armature and field coils, commutators, switchboards, trolley wheels, magnets and all kinds of experimental electrical apparatus, and maintains a winding and repairing department which is equipped for the largest work. With its building, consisting of nine floors, together with extra warehouses, it is enabled to carry for prompt shipment one of the largest complete stocks of electrical supplies. Its Southern warehouse is located at Charlotte, N. C.

Facts Worth Reading.

A bulletin issued by the Williams Patent Crusher & Pulverizer Co., main office, 2700-23 North Broadway, St. Louis, Mo., presents a few facts confined to actual results from Williams grinders. With one or two exceptions the machines referred to in the letters reproduced have been in continuous operation for more than five years, and embrace the Universal and Vulcanite types. This company has also issued a pamphlet illustrating and describing Williams patent hammer crushers and grinders and a list of cement and gypsum plants in which they are in use.

The Bailey Combination Furnace.

A catalogue has recently been issued which illustrates and describes in detail the Bailey combination sheet and pair furnace, for which George J. Hagan, contracting engineer and designer and builder of furnaces and gas producers, 401 People's Bank Bldg., Pittsburgh, Pa., is the sole licensee. The Bailey combination furnace is a tandem arrangement of stoker-equipped fire box, pair heating and sheet furnace. In its construction much consideration has been given to the subject of combustion and behavior of the gases passing from the fire box to the stack, while the stoker attachment is said to insure absolute uniform temperature.

Lally Reinforced Concrete Columns.

Architects and builders will be interested in a booklet issued by the Lally Column Co., Chicago, Ill., which illustrates and describes the design, construction and application of the Lally reinforced-concrete columns for structural purposes. Lally columns go through a process of manufacture by special patented machinery, which is said to entirely eliminate air holes or cavities. The outside shell is made of steel, while the inner part or filling is made of sand, cement and blue trap rock thoroughly compressed, which is claimed to give the highest possible results for the compression of concrete. Each column is filled under the supervision of an official inspector.

Berger's Ferro-Lithic Plates.

Ferro-lithic steel plates are those whose cross-section shows a continued series of alternate dovetails, and were originally designed for combined centering and reinforcing of concrete to meet the demand for a permanent fireproof roof. Their application has been extended to other uses, and they are now extensively employed for centering and reinforcing concrete slabs for flat and arched floors, slidings of buildings, lining of coal bunkers, sidewalk construction, etc. These plates are manufactured by the Berger Manufacturing Co., manufacturer of sheet-metal products, Canton, O., and are illustrated and described in a catalogue which the company has issued.

Reinforced Concrete Construction.

Unique in its design and mechanical construction is a catalogue and album issued by the Reinforced Concrete Co., 1609-11 Wright Bldg., St. Louis. This company has designed and constructed many notable reinforced-concrete buildings throughout the country, but announces that in future it will not engage in actual construction work, but will devote its organization entirely to its engineering interests. The publication referred to contains a complete list of structures designed by the company in the last five years, and presents photographs in colors of many of them. The aggregate value of construction shows a steady increase from \$64,500 in 1905 to \$546,200 in 1909, emphasizing the growing importance of reinforced concrete as a building material.

The Smith Concrete Mixer.

Handlers and users of concrete will be interested in a catalogue illustrating and describing the Smith concrete mixer which has been issued by the T. L. Smith Company, general sales office Old Colony Bldg., Chicago. This company manufactures the Smith machine, which is a batch mixer of the rotating-drum type, with a double-conical mixing drum resting in a U-shaped cradle. Two cast-iron arms or trunnions are firmly attached to the upper extremities of the U-frame and support the cradle, allowing it to swing freely. The base of the cradle is of

channel iron with angle-iron uprights and braces, while the frame is strongly reinforced with steel plates and strengthened with pipe distance pieces and trunnions.

Introducing New Lathe.

Among prominent manufacturers of iron and steel machinery is the Cincinnati Iron & Steel Co., Cincinnati. This company is introducing a new 14-inch lathe with its other products, and anticipates a favorable demand for it. It states that the outlook for trade is exceedingly promising, and reports the following recent sales: 10-ton, 75-foot span, 3-motor electric crank to the Nashville (Tenn.) Bridge Co.; 6-ton, 3-motor, 31½-foot span electric crane to the Enterprise Foundry & Fence Co., Indianapolis, Ind.; 5-foot radial drill to Cincinnati (O.) Equipment Co.; 10-ton, 10-gauge power brake to American Laundry & Machine Co., Norwood, O.; six 14-inch lathes, alligator shear and other tools to Robert S. Armstrong & Bros., Atlanta, Ga.; 26x26x12 planer, with double head, to Queen City Machine Tool Co., Cincinnati, O.

The Canton Culvert Co.'s Literature.

"Acme" culverts for steam and electric railways and other purposes are manufactured of a special material which is said to differ from steel and excel in quality even the best old-fashioned iron. In the production of this material the impurities existing in steel and ordinary iron are said to be eliminated to the greatest extent possible and practical, producing a homogeneous metal almost 100 per cent. pure. The "Acme" galvanized No-Co-Ro corrugated metal culverts are manufactured by the Canton Culvert Co., Canton, O., and are described and illustrated in a catalogue which the company has issued. Other literature which this company is distributing includes a special railway brochure entitled "Acme" Culverts for Steam and Electric Railways, together with a booklet entitled "No-Co-Ro Metal," a bulletin entitled "The Preservation of Iron and Steel" and a Spanish folder.

The Huber Engines and Threshers.

Because of the high market price of all foodstuffs, together with other conditions, the increased cultivation of grains has been greatly encouraged, and there is every reason to believe that the harvest will be correspondingly large. As a manufacturer of machinery for handling grain the Huber Manufacturing Co., main office and plant, Marion, O., has prepared to meet an urgent demand for the best equipment and machinery which can be produced along this line. It has increased its facilities for manufacturing and has carefully and persistently experimented to find out what, if any, changes could be made in Huber machinery to economize operating expenses or give better results than have heretofore been obtained. It has made some improvements, and its catalogue for 1910 describes in detail the working parts of its machine, while the illustrations bring out these parts more fully and show as thoroughly as possible the principle upon which the machines are constructed. Among the products of the company are traction engines for farm and other purposes, portable, stationary and detached engines, water tanks, threshing machines, etc.

Terra-Cotta Hollow Tile Fireproofing

Under the title of "Standard Fireproof Construction" the National Fireproof Co. of Pittsburgh, Pa., and other cities has published a catalogue illustrating and describing the advantages and features of terra-cotta hollow-tile fireproofing as used in the construction of standard steel-frame fireproof buildings, and giving complete data covering the installation. In the introductory pages the uses of terra-cotta hollow tile are concisely explained. Further on are illustrated and described the methods of applying the different shapes of hollow tile to meet the various designs of steel structures. The methods shown include the fireproofing of columns, girders and beams; the construction of flat and segmental arches in fireproof floor construction, and giving safe load data for each; fireproof positions; wall furring, and roof construction. The catalogue is printed on heavy glazed paper and the illustrations are all in natural colors. To architects, engineers, contractors and others interested in steel-frame fireproof buildings the catalogue will be sent without cost, as well as other books covering various phases of hollow-tile construction which the company publishes.

Scientific Oil-Mill Machinery.

Everyone interested in oil mills should have a copy of the 1910 "Scientific" oil mill machinery catalogue, which describes disc hullers, pneumatic seed cleaners, double shakers, hull beaters and separators, hot

cake breakers, friction drive force feeders and attrition mills. There are new and valuable features illustrated in the catalogue, issued by the Foss Manufacturing Co. This company guarantees to reduce the loss in separation in any oil mill to less than 1 per cent. This is a warranty that has prominently appeared in the company's catalogue for several years. The catalogue contains illustrations of oil mill installations, and as the company has a skilled force of engineers constantly employed, it is in a position to furnish drawings and blueprints specially prepared to suit the requirements of any oil mill. This service is without cost to the oil mill. The company also maintains a highly organized and equipped laboratory, where daily tests are made of all metals entering into the construction of "Scientific" machinery. This insures a product that is always up to the highest standard in efficiency. The edition of the new catalogue is limited, and it would be well for people interested in oil mill machinery to write quickly to the Foss Manufacturing Co., Springfield, O., for a copy.

Representative Cement Houses.

Believing there is a demand for accurate information as to what has been accomplished in the direction of cement-house construction, the Universal Portland Cement Co. has published a beautiful booklet on the subject. The booklet does not explain the requirements of fireproof construction, nor present plans for fireproof houses, nor compare their cost to that of wood houses, but rather indicates the unusual attractiveness of a concrete home and to state its cost and advantages. Cement houses have been divided, in the publication, into four classes. The first class embraces the various forms of reinforced-concrete houses, including the monolithic type, those with solid concrete walls and those with hollow walls; the second class includes the cement-block or hollow-tile structures, with a coating of cement plaster on the exterior; the third class comprises the plain cement-block or tile structure with no exterior coat or plaster, and the fourth class consists of cement-brick houses. None of the types are necessarily fireproof, because when this term is used it embodies the use of concrete for interior as well as exterior construction. Under each class are illustrated the various types of houses. Each illustration is accompanied by a brief description, giving the names of the owner and the architect; the cost of the various buildings is also included, this being obtained from the owners. Copies may be obtained from the Universal Portland Cement Co., Chicago, Ill., or Pittsburgh, Pa., for 50 cents each.

The Fred A. Jones Company.

In order to acquaint former and prospective clients with its facilities and capabilities as consulting engineer and "cost-plus" contractor, the Fred A. Jones Company of Houston, Tex., has published a book setting forth its general methods of doing work, its usual business arrangements and the character of work which it has handled in the past. The Fred A. Jones Company is the outgrowth of the business of Fred A. Jones, engineer, established in 1902. It was incorporated in order that the principal men connected with it might become interested, this being desirable in order to obtain the best results. In the introductory of the book the personnel of the company and a brief outline regarding the individual capabilities of the principal officers are mentioned. This company undertakes all classes of mechanical, electrical and civil engineering work, acting both as consulting engineer and contractor. It also makes a specialty of reports on all kinds of properties and undertakings. Its work is divided into four classes—consulting engineering, report work, construction work, operating. Its methods of conducting these various departments and the business arrangements it makes with its clients are described. The illustrations evidence the company's facilities. The work mentioned includes: Docks, grain elevator, power station, terminal yards, dock-handling machinery, etc., for Southern Pacific Terminal Co., Galveston; electric power station for Corsicana (Tex.) Gas & Electric Co.; pumping plant for rice-farm irrigation in South Texas; sand-lime brick plant for Houston (Tex.) White Brick Co.; electrical equipment for Bessmay (Tex.) mill of Kirby Lumber Co.; power plant for Brazos Hotel, Houston; electrical equipment for Savoy Apartments, Houston; power plant for Prætorian Bldg., Dallas; mechanical equipment, including electric, ice and refrigerating plants and vacuum cleaning, wiring, steam-heating and telephone systems for Monteleone Hotel, New Orleans; designing and constructing Texas State Railroad from

Rusk to Palestine, and designing and constructing electric interurban railway between Dallas and Sherman for Texas Traction Co.

OBITUARY.

Death of Charles F. Aaron.

Announcement has been made of the death of Charles F. Aaron, general sales manager of the New York Leather Belting Co., 51 Beekman St., New York, and former president of the American Supply and Machinery Manufacturers' Association, which occurred at his home at Plainfield, N. J., on March 4. For many years Mr. Aaron has been closely identified with the largest machinery and supply manufacturing interests in the United States, and at the time of his death he was promoting a plan for general adoption by belting manufacturers of standardizing the specifications upon which all leather belting of first quality should be constructed.

BIG EQUIPMENT ADDITIONS.

Plans of the Southern Railway Co. for Improvements.

[Special Dispatch to Manufacturers' Record.]
Washington, D. C., March 16.

It is authoritatively stated that the Southern Railway Co. is preparing to make considerable additions to its equipment and has under consideration a program of other improvements. Indications of these plans have been given recently in the MANUFACTURERS' RECORD in connection with the market reports that the Southern Railway Co. had issued specifications for 6000 freight cars, including 3000 steel hopper cars and 600 steel gondola cars, and that it would purchase 60,000 tons of steel rails, half of them from the Tennessee Coal, Iron & Railroad Co. of Birmingham, and half of them from the Maryland Steel Co., Sparrows Point.

The official announcement of considerable additions to rolling stock and of other contemplated improvements by the Southern Railway is one of the gratifying promises of renewed activity not only in the South, served by nearly 8000 miles of that system, but also in the whole country. With the exception of five or six roads, the large lines in the South were not very liberal in ordering rolling stock in 1909, in spite of the fact that traffic had begun to increase and the demands of general business upon the roads promised to be heavy this year. Since the beginning of the year, however, there has been notable revival of orders for equipment from many quarters. These orders mean the opportunity for locomotive and car works to get under greater swing and an increasing demand upon the ironmasters of the country.

FINANCIAL NEWS

The MANUFACTURERS' RECORD invites information about Southern financial matters. Items of news about new institutions, dividends declared, securities to be issued, openings for new banks, and general discussions of financial subjects bearing upon Southern matters.

Review of the Baltimore Market.

Office MANUFACTURERS' RECORD,

Baltimore, Md., March 16.

The Baltimore stock market was rather quiet during the past week. In the trading United Railways common sold from 13 1/4 to 13 3/4; do. incomes, 61 1/4 to 60; do. funding 5s, 84 to 83 1/2; do. do. scrip, 84 to 83 1/2; United 4s, 86 1/4 to 86; Consolidated Gas, Electric Light & Power preferred, 80 to 84; Consolidated Gas 6s, 100 1/4; do. 4 1/2s, 91; Seaboard Company common, 24 1/2 to 25; do. do. second preferred, 45 1/2 to 44 1/2; Seaboard 4s, 86; do. do. stamped, 84 to 85 1/4, with last sale at 85; do. three-

year 5s, 99 1/4; do. 10-year 5s, 99 1/4; do. adjustment 5s, 72; Cotton Duck common, 5 1/4 to 5 3/4; do. preferred, 17 1/4 to 17; Cotton Duck 5s, 71 1/4 to 70 1/4; G.-B.-S. Brewing 1sts, 44 1/4 to 44.

Bank stock sold as follows: Farmers and Merchants', 47; Citizens', 39; Bank of Baltimore, 121; Mechanics', 28.

International Trust sold from 152 to 153 1/4; Fidelity & Deposit, 154; Maryland Casualty, 93 1/4; American Bonding, 78 1/2; Mercantile Trust, 142.

Other securities were traded in thus: Atlantic Coast Line of Connecticut, 254 1/2 to 252, with last sale at 255; Atlantic Coast Line Consolidated debenture 4s, 102 1/2 to 102 3/4, with last sale at 102 3/4; do. Consolidated 4s, 96 1/4; do. Connecticut 5s, certificates, 105 1/4; City & Suburban (Washington) 5s, 103 1/4; Fairmont & Clarksburg Traction 5s, 96 1/4; Macon, Dublin & Savannah 5s, 97 1/4 to 97 3/4; Northern Central Railway stock, 130 to 128, with last sale at 129; Virginia Century, 89 1/4 to 89; Merchants & Miners' Transportation Co., voting trust, 87 to 87 1/2; Baltimore City 4s, 1958, 104 1/2; do. 3 1/2s, 1928, 96 1/4; do. do. 1930, 96 1/4; City & Suburban (Baltimore) 5s, 106 1/4; Consolidation Coal, 112; West Virginia Central 6s, 101 1/4 to 101 1/4; Alabama Consolidated Coal & Iron 5s, 80 1/2; Houston Oil common, 7 1/2 to 7; United States Steel, 88; Atlantic Coast Line common, 133; Virginia Electric Railway & Development 5s, 102 1/2; Washington Terminal 3 1/2s, 89 1/4; Charleston Consolidated Electric 5s, 92 1/4; Coal & Iron Railway 5s, 101 1/4; Georgia, Carolina & Northern 5s, 106 to 105 1/4; Georgia Southern & Florida 5s, 109 1/4; Baltimore Electric 5s, stamped, 89 1/4; Carolina Central 4s, 92 1/4; Norfolk Railway & Light 5s, 99 1/4 to 99; Wilmington & Weldon 5s, 111; Detroit United 4 1/2s, 82 1/4; Georgia & Alabama Consolidated 5s, 105 1/4 to 105 3/4; Virginia Railway & Power common, 26; Maryland Electric 5s, 98 1/4 to 98 1/2; Milwaukee Electric Railway & Light 5s, 105 1/2.

SECURITIES AT BALTIMORE.

Last Quotations for the Week Ended March 16, 1910.

Railroad Stocks.	Par.	Bid.	Asked.
Atlantic Coast.....	100	133	...
Atlantic Coast of Conn.....	100	252	255
Fairmont & Clarksburg Trac.....	20	26	...
Georgia Sou. & Fla.....	100	25	...
Georgia Sou. & Fla. 1st Pfd.....	100	97 1/2	...
Georgia Sou. & Fla. 2d Pfd.....	100	75	...
Seaboard Company Common.....	24	25	...
Seaboard Company 1st Pfd.....	100	75	...
Seaboard Company 2d Pfd.....	100	44 1/2	45 1/2
United Rys. & Elec. Co.....	50	13	13 1/4
Bank Stocks.			
Citizens' National Bank.....	10	29	...
Drovers & Mech. Nat. Bank.....	100	230	240
Farmers & Mer. Nat. Bank.....	40	48	...
Merchants' National Bank.....	100	175	180
National Bank of Baltimore.....	100	121 1/2	122
National Exchange Bank.....	100	155	...
National Mechanics' Bank.....	10	28	...
National Union Bank of Md.....	100	122	122 1/2
Second National Bank.....	100	195	...
Trust, Fidelity and Casualty Stocks.			
American Bonding Co.....	25	78	79
Balto. Trust & Guarantee.....	100	349	...
Fidelity & Deposit.....	50	152	...
International Trust.....	100	153	153 1/2
Mercantile Trust & Deposit.....	50	142	...

Miscellaneous Stocks.			
Ala. Con. Coal & Iron Pfd.....	100	60	...
Con. Cotton Duck Common.....	50	4 1/2	5
Con. Cotton Duck Pfd.....	50	17	18
Con. Gas, Elec. Lt. & P. Com.....	100	45 1/4	45 1/2
Con. Gas, Elec. Lt. & P. Pfd.....	100	80 1/2	85
Consolidation Coal.....	100	111	113
Georges Creek Coal.....	100	113	115

Railroad Bonds.			
Alabama Midland 5s.....	107	107 1/2	...
Atlanta & Birmingham 4s.....	85	86	...
Atlantic Coast Line 1st 4s, 1932.....	96	96 1/2	...
At. Coast Line Com. 4s, Cfs., 5-20s, 91.....	100	100	...
Atlantic Coast Line (Conn.) 5s, Cfs., 105.....	100	105	...
Atlantic Coast Line (S. C.) 4s, 1948.....	97	...	...
Balto. & Harrisburg 5s, 1936.....	105	...	...
Balto. & Harrisburg Ext. 5s, 1938.....	104	...	...
Carolina Central 4s, 1949.....	92	92 1/2	...
Coal & Iron Railway 5s, 1920.....	101	101 1/2	...
Col. & Green. 1st 6s, 1916.....	107 1/4	108	...
Florida Cent. & Penin. Con. 5s.....	103	105	...
Florida Southern 4s, 1943.....	105 1/4	105 1/2	...
Georgia, Car. & North. 1st 5s, 1922.....	106 1/4	105 1/2	...
Georgia Pacific 1st 5s, 1922.....	113 1/2	114 1/2	...
Georgia South. & Fla. 1st 5s, 1945.....	108 1/2	109 1/2	...
Maryland & Penna. 4s, 1951.....	92	...	...
Macon, Dublin & Sav. 5s.....	97	98	...
Petersburg Class A 5s, 1926.....	108	110	...
Richmond & Dan. Gold 6s, 1915.....	106 1/4	106 1/2	...
Seaboard Air Line 4s, 1960.....	85 1/2	87	...
Seaboard 4s, Stamped.....	84 1/2	85	...
Seaboard Air Line 5s, 1-year, 1911.....	92 1/2	93 1/2	...
Seaboard Air Line 5s, 3-year, 1911.....	96 1/2	97 1/2	...
Silver Spg., Ocala & Gulf 4s, 1918.....	96 1/2	98	...
South Bound 5s, 1941.....	104 1/2	104 1/2	...
Virginia Midland 2d 6s, 1911.....	101	...	...
Washington Terminal 3 1/2s.....	89 1/2	90	...
Washington-Vandemere 4 1/2s.....	97 1/2	98 1/2	...
Western Maryland 4s, 1952.....	86 1/4	...	...
Western Maryland Con. 4s.....	73	...	...
Western N. C. Con. 6s, 1914.....	106 1/2	...	...
West Va. Cent. 1st 6s, 1911.....	101 1/4	101 1/2	...
Wil. Col. & Aug. 5s, 1910.....	100	100 1/2	...
Wilmington & Wld. Gold 5s, 1935.....	112	...	...

Street Railway Bonds.			
Anacostia & Potomac 5s, 1949.....	102	102 1/2	...
Anacostia & Potomac 5s, Gtd.....	105	...	...
Balto. City Pass. 5s, 1911.....	100 1/4	100 1/2	...
Balto., Sp. Pt. & C. 4 1/2s.....	93 1/4	94	...

Balto. Traction 1st 5s, 1929.....	108 1/2	...	...
Balto. Trac. (N. B. Div.) 5s, 1942.....	112 1/2	...	...
Central Ry. Con. 5s (Balto.), 1932.....	109 1/4	110	...
Central Ry. Ext. 5s (Balto.), 1945.....	103 1/2	105 1/2	...
Charleston City Railway 5s, 1923.....	105	...	...
Charleston Con. Electric 5s, 1909.....	92	...	...
City & Suburban 5s (Balto.), 1922.....	106 1/2	107	...
City & Suburban 5s (Wash.), 1945.....	103 1/2	105 1/2	...
Fairmont & Clarksburg Trac. 5s.....	96 1/2	97 1/2	...
Lake Roland Elevated 5s, 1943.....	111 1/2	112 1/2	...
Maryland Electric Railways 5s.....	98 1/2	99 1/2	...
Memphis Street Railway 5s.....	90 1/4	90 1/2	...
Norfolk & Portsmouth Trac. 5s.....	81	82 1/2	...
Norfolk Railway & Light 5s.....	99 1/4	99 1/2	...
Norfolk Street Railway 5s, 1944.....	106	107 1/2	...
Richmond Traction 5s.....	104 1/4	...	...
United Railways 1st 4s, 1949.....	86	86 1/2	...
United Railways Inc. 4s, 1949.....	60	60 1/2	...
United Railways Funding 5s.....	83	84	...

Miscellaneous Bonds.			
Ala. Con. Coal & Iron 5s.....	80	82	...
Baltimore Electric 5s.....	89 1/2	90	...
Consolidated Gas 6s, 1910.....	100	100 1/4	...
Consolidated Gas 5s, 1939.....	105 1/4	110	...
Consolidated Gas 4 1/2s.....	90 1/2	92	...
Con. Gas, Elec. Lt. & P. 4 1/2s.....	77 1/4	83	...
Fairmont Coal 1st 5s.....	95	95 1/2	...
G.-B.-S. Brewing 1st 4s.....	42 1/2	44 1/2	...
G.-B.-S. Brewing Inc. 5s.....	10	11	...
Maryland Steel Co. 5s.....	102	103	...
Mt. Vernon-Woodly Cot. Duck 5s.....	70 1/4	71 1/2	...
United Elec. Lt. & P. 4 1/2s.....	91	92	...

SOUTHERN COTTON-MILL STOCKS.

Quotations Furnished by Hugh MacRae & Co., Wilmington, N. C., for Week Ending March 14.

	Bid.	Asked.
Abbeville Cotton Mills (S. C.).....	70	71
Aiken Mfg. Co. (S. C.).....	90	...
American Spinning Co. (S. C.).....	155	...
Anderson Cotton Mills (S. C.).....	100	...
Arkwright Mills (S. C.).....	60	65
Augusta Factory (Ga.).....	100	105
Avondale Mills (Ala.).....	120	125
Belton Mills (S. C.).....	120	125
Bibb Mfg. Co. (Ga.).....	114	...
Brandon Mills (S. C.).....	98	99 1/2
Cabarrus Cotton Mills (N. C.).....	125	145
Chadwick-Hoskins Mfg. Co. (N. C.).....	100	...
Chadwick-Hoskins Mfg. Co. (N. C.) Pfd.....	102	...
Cherokee Mfg. Co. (S. C.).....	170	...
Clifton Mfg. Co. (S. C.).....	105	110
Clifton Mfg. Co. (S. C.) Pfd.....	101	...
Clinton Cotton Mills (S. C.).....	120	130
Columbus Mfg. Co. (Ga.).....	93	98
Courtenay Mfg. Co. (S. C.).....	100	...
Dallas Mfg. Co. (Ala.).....	110	...
Darlington Mfg. Co. (S. C.).....	80	88
Drayton Mfg. Co. (Ala.).....	100	...
Eagle & Phenix Mills (Ga.).....	135	...
Enoree Cotton Mills (S. C.).....	176	...
Enoree Mfg. Co. (S. C.).....	52	60
Enoree Mfg. Co. (S. C.) Pfd.....	95	100
Enterprise Mfg. Co. (Ga.).....	80	85
Exposition Cotton Mills (Ga.).....	195	200
Gaffney Mfg. Co. (S. C.).....	80	82
Galveston Cotton Mills (Ga.).....	75	80
Granby Cot. Mills (S. C.) 1st Pfd.....	35	45
Greenville Mfg. Co. (S. C.).....	160	165
Greenville Cotton Mills (S. C.).....	58	61
Grendel Mills (S. C.).....	112	115
Henrietta Mills (N. C.).....	160	175
King Mfg. Co., John P. (Ga.).....	90	93
Lancaster Cotton Mills (S. C.).....	130	...
Lancaster Cot. Mills (S. C.) Pfd.....	97	100
Langley Mfg. Co. (S. C.).....	120	128
Laurens Cotton Mills (S. C.).....	135	...
Limestone Mills (S. C.).....	150	170
Lockhart Mills (S. C.).....	78	80
Lockhart Mills (S. C.) Pfd.....	90	90
Loray Mills (N. C.) Pfd.....	90	97 1/2
Marbleboro Cotton Mills (S. C.).....	80	82
Mayo Mills (N. C.).....	165	185
Mills Mfg. Co. (S. C.).....	100	...
Mills Mfg. Co. (S. C.) Pfd.....	109	...
Monaghan Mills (S. C.).....	154	161
Monarch Cotton Mills (S. C.).....	102	107
Newberry Cotton Mills (S. C.).....	125	140
Norris Cotton Mills (S. C.).....	125	130
Olympia Cot. Mills (S. C.) 1st Pfd.....	90	...
Orangeburg Mfg. Co. (S. C.) 1st Pfd.....	104	106
Orr Cotton Mills (S. C.).....	104	106
Pacolet Mfg. Co. (S. C.).....	99 1/2	102
Pelzer Mfg. Co. (S. C.).....	150	160
Piedmont Mfg. Co. (S. C.).....	175	177
Poe Mfg. Co. (S. C.).....	170	180
Richland Cot. Mills (S. C.) 1st Pfd.....	45	...
Raleigh Cotton Mills (N. C.).....	100	105
Roxboro Mills (N. C.).....	153	160
Saxon Mills (S. C.).....	127	...
Shiloh Mfg. Co. (Ga.).....	85	91
Spartan Mills (S. C.).....	130	140
Springstein Mills (S. C.).....	100	...
Tuacapa Mills (S. C.).....	250	...
Trion Mfg. Co. (Ga.).....	140	...
Union-Buffalo Mills (S. C.) 1st Pfd.....	70	75
Victor Mfg. Co. (S. C.).....	143	160
Warren Mfg. Co. (S. C.).....	107	...
Warren Mfg. Co. (S. C.) Pfd.....	105	110
Washington Mills (Va.).....	122	...
Washington Mills (Va.) Pfd.....	108	110
Whitney Mfg. Co. (S. C.).....	122	...
Williamson Mills (S. C.).....	117	125
Wicasset Mills (S. C.).....	120	125
Woodruff Cotton Mills (S. C.).....	156	...
Woodside Cotton Mills (S. C.).....	95	100
Woodside Cot. Mills (S. C.) Pfd.....	95	97

Quotations Furnished by William S. Glenn, Broker, Spartanburg, S. C., for Week Ending March 14.

	Bid.	Asked.
Abbeville Cotton Mills (S. C.).....	70	71
Aiken Mfg. Co. (S. C.).....	90	...
American Spinning Co. (S. C.).....	160	...
Anderson Cotton Mills (S. C.).....	53	57
Arcadia Mills (S. C.).....	97	...
Arkwright Cotton Mills (S. C.).....	97	106
Augusta Factory (Ga.).....	60	65
Avondale Mills (Ala.).....	116	...
Belton Mills (S. C.).....	120	...
Brandon Mills (S. C.).....	99	102
Brogan Mills (S. C.).....	...	24
Cannon Mfg. Co. (N. C.).....	135	...
Cabarrus Cotton Mills (N. C.).....	135	135
Chickamauga Mfg. Co. (N. C.).....	174	174
Chilcusa Mfg. Co. (N. C.).....	175	...
Clifton Mfg. Co. (S. C.).....	102	105
Clinton Cotton Mills (S. C.).....	118	125
Columbus Mfg. Co. (Ga.).....	93	98
Courtney Mfg. Co. (S. C.).....	...	100
Dallas Mfg. Co. (Ala.).....	99	...
Darlington Mfg. Co. (S. C.).....	75	...
D. E. Converse Co. (S. C.).....	75	100
Drayton Mills (S. C.).....	85	100
Eagle & Phenix Mills (Ga.).....	117	...

Easley Cotton Mills (S. C.).....	165	175
Enoree Mfg. Co. (S. C.).....	50	60
Enoree Mfg. Co. (S. C.) Pfd.....	95	100
Enterprise Mfg. Co. (Ga.).....	80	85
Exposition Cotton Mills (Ga.).....	200	205
Gaffney Mfg. Co. (S. C.).....	82	85
Galveston Cotton Mills (Ga.).....	75	80
Glenwood Cotton Mills (S. C.).....	150	155
Gluck Mills (S. C.).....	98	102
Granby Cot. Mills (S. C.) 1st Pfd.....	35	45
Granville Mfg. Co. (S. C.).....	160	165
Greenwood Cotton Mills (S. C.).....	58	61
Grendel Mills (S. C.).....	112	115
Hartsville Cotton Mill (S. C.).....	170	175
Henrietta Mills (N. C.).....	160	165
Inman Mills (S. C.).....	106	108
King Mfg. Co. (S. C.).....	90	93
Lancaster Cotton Mills (S. C.).....	130	135
Lancaster Cot. Mills (S. C.) Pfd.....	97	100
Langley Mfg. Co. (S. C.).....	120	127
Laurens Mills (S. C.).....	127	130
Limestone Mills (S. C.).....	160	170
Lockhart Mills (S. C.).....	78	85
Lockhart Mills (S. C.) Pfd.....	99	100
Loray Cotton Mills (N. C.) Pfd.....	85	87 1/2
Marlboro Cotton Mills (S. C.).....	80	85
Mills Mfg. Co. (S. C.).....	100	105
Molokoh Mfg. Co. (S. C.).....	106	110
Monaghan Mills (S. C.).....	152	161
Monarch Cotton Mills (S. C.).....	105	107
Newberry Cotton Mills (S. C.).....	125	140
Ninety-six Cotton Mills (S. C.).....	140	146
Norris Cotton Mills (S. C.).....	125	130
Olympia Cotton Mills (S. C.).....	90	93
Orr Cotton Mills (S. C.).....	106	108
Pacolet Mfg. Co. (S. C.).....	101	102
Pacolet Mfg. Co. (S. C.) Pfd.....	99	102
Pelzer Mfg. Co. (S. C.).....	150	157
Piedmont Mfg. Co. (S. C.).....	175	177
Poe Mfg. Co. (S. C.).....	170	180
Saxon Mills (S. C.).....	127	130
Sibley Mfg. Co. (Ga.).....	71	73
Spartan Mills (S. C.).....	130	140
Trion Mfg. Co. (Ga.).....	140	140
Tucapau Mills (S. C.).....	275	275 1/2
Union-Buffalo (S. C.) 1st Pfd.....	74	77 1/2
Union-Buffalo (S. C.) 2d Pfd.....	20	25
Victor Mfg. Co. (S. C.).....	150	160
Warren Mfg. Co. (S. C.).....	107	110
Warren Mfg. Co. (S. C.) Pfd.....	106	110
Washington Mills (Va.).....	28	28
Washington Mills (Va.) Pfd.....	106	110
Whitney Mfg. Co. (S. C.).....	122	125
Wiscasset Mills (N. C.).....	135	135
Woodruff Cotton Mills (S. C.).....	98	103
Woodruff Cotton Mills (S. C.) Pfd.....	98	103
Watts Mills (S. C.).....	90	95
Williamston Mills (S. C.).....	117	125

FINANCIAL CORPORATIONS.

Ala., Andalusia.—Official: The Andalusia Bank & Trust Co. incorporated; capital \$40,000; business is to begin May 1 in Opera-house Bldg. with D. A. McArtan president, D. McRaney vice-president and L. M. Studstill cashier, all at Andalusia. Messrs. McRaney and Studstill's present address is Desubridora, Durango, Mexico.

Ala., Gadsden.—Official: The Etowah Bank & Savings Co. incorporated and chartered; capital \$200,000; incorporators, J. B. Wadsworth, C. S. Ward and S. S. Caldwell, all of Gadsden.

Fla., Gainesville.—Official: The Florida Bank of Gainesville incorporated; capital \$75,000; J. J. Haymans, president; Chas. A. Faircloth, active vice-president; R. O. Medlin and J. W. McDowell, vice-presidents; J. M. Fennell, cashier, and F. R. Hartsfield, assistant cashier. Business is to begin about May 1.

Ga., Atlanta.—The Equitable Casualty Co. is reported to have begun business in the Candler Building; John S. Candler, president; J. J. Disoway, vice-president; S. A. Moore, secretary and treasurer; Shepard Bryan, general counsel.

Ga., Augusta.—A fire insurance company is reported being organized with \$500,000 capital by John R. Burke and others.

Ga., Clayton.—The Rabun County Bank, capital \$25,000, is reported being organized by John D. Walker of Sparta, Ga., and E. P. Simpson, Jr., of Clayton.

Ga., Jefferson.—The Bank of Jackson County, capital \$25,000, with authority to increase to \$100,000, is reported chartered by H. J. Mobley, W. K. Gresham and A. C. Brown of Jefferson and P. J. Pendergrass.

Ga., Macon.—The Continental Trust Co., capital \$50,000, is reported organized with R. J. Taylor president and W. R. Rogers secretary and treasurer.

Ga., Vidalia.—Reported that a new bank, capitalized at \$25,000, is to be established by a Mr. Sims of Richland, Ga.

Ky., Crescent Springs.—Official: The Crescent Springs Building Association chartered and incorporated; capital \$100,000. Business began February 1 with J. W. Scott president, H. Kroger vice-president, Ed Ruprecht, secretary; Ed Rudolph treasurer, S. L. Blakely attorney.

Ky., Harlan.—Official: The People's Bank of Harlan incorporated; capital \$15,000; W. H. H. Smith, president, Harlan, Ky.; A. M. Clark, cashier, Boons Path, Va.; directors, W. F. Hall, J. S. Kelly, Cam Lewis, W. L. Bailey and J. S. Forrester of Harlan, Ky. Business is to begin in April.

Ky., Lexington.—The Henry Clay Fire Insurance Co. has filed articles of incorporation; capital \$200,000; surplus \$300,000. F. H. Watson of Mayville and others are interested.

Ky., Lovelaceville.—The Citizens' Bank incorporated; capital \$15,000. Mr. Stahl is president, Mr. Rudolph vice-president, Mr. Wyman cashier. Business is to begin about May 15.

Ky., Munfordville.—Official: The Munfordville Bank incorporated; capital \$15,000. Recto John, Highland Park, Ky., president; S. M. Lawler, Millerstown, Ky., vice-president, and Grant Van Fleet, Munfordville, Ky., cashier; J. F. Edwards, Hardyville, director. Business will begin April 1.

Ky., Newport.—The Citizens' Commercial and Savings Bank is reported to have filed articles of incorporation; capital \$50,000; incorporators, Fred B. Bassmann, Phil J. Veith, Oscar Reimert, Joseph M. Betz, M. E. Purcell and Otto Wolf.

Md., Baltimore.—Articles of incorporation for the American Exchange and Savings Bank of Baltimore are reported filed; capital \$100,000; incorporators, Frederick Roloson, William M. Baker, Charles G. Stack, Jr., Ignatius Brooks and Robert Hanna.

Md., Baltimore.—Articles of incorporation for the Baltimore Bonding & Fidelity Co., capital \$500,000, have been filed by Richard W. Jones, Howard B. Seel, Horace A. McSherry, William T. Dietrich and George H. West.

Md., Chestertown.—The Third National Bank has been approved; capital \$50,000; organizers, H. H. Barroll, Adam F. Huey, David T. Hurlock, Garrett Foxwell, Wilbur W. Hubbard, William B. Copper and T. B. Durling.

Md., Hampstead.—The First National Bank of Hampstead has been approved; capital \$25,000; organizers, Daniel Shamberger of Hampstead, Md.; Joseph M. Armacost, Edgar M. Bush, William A. Abbott and Amos R. Schultz.

Miss., Itta Bena.—Official: The Yazoo State Bank chartered; capital \$30,000. Business is to begin about April 1 with J. J. Long, president; C. Dunn, vice-president, and J. W. Greer, cashier.

Mo., Kansas City.—The Mid-Continental Fire Insurance Co. has published its charter; capital \$1,000,000. Directors, W. F. LaCaff, B. H. Wheeler, Edwin R. Durham, P. Connor, Dan Danciger, J. W. Morrison, Geo. Beamish, John Tobin, Theodore C. Peltzer, W. C. Howe, Jr., and E. T. Powers, Kansas City, Mo.; W. T. McCorey and W. J. Craven, Excelsior Springs, Mo.

N. C., Farmville.—The Citizens' Bank is reported chartered; authorized capital, \$25,000; incorporators, T. C. Turnage, John T. Thorne and others.

Okla., Oklahoma City.—The Safety Investment Co. of Oklahoma City, capital \$10,000, is reported incorporated; directors, G. P. Benson and T. S. Hartley of Snyder and S. B. Bailey of Colorado Springs, Col.

Okla., Osage.—The First State Bank of Osage is reported incorporated with \$10,000 capital; directors, W. H. McBride, A. L. Welsh and G. F. Benz, all of Oklahoma City.

Okla., Packerstown.—The Packerstown State Bank, capital \$25,000, is reported organized with directors thus: President, J. M. Browning of Mill Creek, Okla.; vice-president, W. S. Guthrie of Oklahoma City; cashier, G. L. Browning, formerly of Holdenville; R. Schunemann of Oklahoma City and W. E. Browning of Lamar. It is expected to begin business soon.

Okla., Tulsa.—Reports state that the Colonial Trust Co., chartered with \$100,000 capital, is to begin business about April 1. Among those interested are T. J. La Rue, president of the First National Bank of Columbus, Kans.; J. W. Stipes of Champaign, Ill.; J. H. Gernard of Danville, Ill.; Walter Trotter, vice-president of the Wynona National Bank of Wynona, Miss.; M. F. Knight and E. L. Orr of Vinita; J. W. Orr, president of the Tulsa First National Bank, Tulsa, Okla., and others.

S. C., Alken.—The Alken Trust and Savings Bank is reported to have begun business; capital \$100,000; directors, B. Sherwood Dunn, president, Alken, and G. Duncan Bellinger, treasurer, Columbia; Richard S. Teeling, Boston, and E. R. Graves, New York.

S. C., Columbia.—Official: The Union National Bank of Columbia chartered and incorporated; capital \$100,000; surplus and undivided profits \$10,000; business began March 5; Jos. Norwood, president; J. H. M. Beaty, vice-president, and E. W. Wilson, cashier. This is a conversion of the Union Savings Bank.

S. C., Conway.—The First National Bank of Conway has been authorized to begin business; capital \$25,000; B. G. Collins, president; J. A. McDermott, vice-president; D. A. Spivey, cashier, and W. Percy Hardwick, assistant cashier. This is said to be a conversion of the Bank of Conway.

S. C., Enoree.—Official: The Bank of Enoree chartered; capital \$50,000; J. Y. Bryson, president; T. R. DeShields and W. J. Fleming, vice-presidents; Lewis L. Logan, cashier. Business is to begin March 21.

S. C., Greenwood.—Official: The People's Bank, capital \$100,000, incorporated and chartered, began business March 7; directors, B. F. McKellar, Jr., president; W. G. Calhoun, vice-president; O. D. Duckett, cashier; C. E. Klugh, assistant cashier; Peter McKellar, Geo. H. Taylor, A. C. Stockman, T. J. Beacham and E. Z. Seymour.

S. C., Spartanburg.—Official: The Security Building and Loan Association chartered; capital \$100,000 with privilege of increasing to \$500,000; directors, J. B. Lee, president; J. P. Fielder, vice-president; W. S. Glenn, secretary-treasurer; H. F. McGee, F. H. Knox, H. L. Bomar, J. W. Allen and S. J. Simpson. Business is to begin about April 12.

S. C., Walhalla.—Official: The Enterprise Bank, capital \$20,000, has been organized with A. P. Crisp president and Geo. R. Pike vice-president. Business is expected to begin about April 15.

S. C., Yorkville.—Official: A building and loan association with capital not to exceed \$500,000 began business March 12 with directors thus: O. E. Wilkins, president; R. E. Heath, vice-president; J. E. Wilburn, secretary and treasurer; W. B. Moore, R. N. Moore, J. R. Lindsay and J. R. Logan.

Tenn., Brighton.—A new bank capitalized at \$15,000 is reported being organized by R. B. Dewese, J. O. Trotter, M. E. Hill, L. A. Smith, W. A. L. McLister and others.

Tenn., Cookeville.—The Cookeville National Bank, capital \$25,000, has been authorized to begin business; J. Whitson, president; J. B. Mitchell, vice-president, and J. S. Reed, cashier. This is a conversion of the Bank of Putnam.

Tenn., Franklin.—The Franklin Trust Co. is reported organized with \$25,000 capital; J. A. Pierce, president; W. C. Jones, vice-president, and J. J. Parker, Jr., cashier.

Tenn., Henning.—The Bank of Henning, capital \$25,000, is reported to have made application for a charter; incorporators, R. B. Lipscomb, J. T. Rains, J. D. Alston, C. M. Anthony, H. C. Kirkpatrick, R. E. Downing and L. R. Graves.

Tenn., Henning.—The Bank of Henning, capital \$25,000, is reported to have made application for a charter. Incorporators: R. B. Lipscomb, J. T. Rains, J. D. Alston, O. M. Anthony, H. C. Kirkpatrick, R. E. Downing and L. R. Graves.

Tenn., Lebanon.—Official: The Union Bank & Trust Co. chartered; capital \$25,000; W. M. Harkreader, president; Sherrell Shipp, vice-president, and Lionel D. Ramsey, cashier. Business began February 14.

Tenn., Nashville.—The Burkhardt Adjustment Co. is reported chartered with \$5000 capital to conduct a collection business; incorporators, H. A. Burkhardt, Charles G. Dean, Frank R. Sanderson, Will R. Manier, Jr., and R. Boyte Howell.

Tenn., Paris.—The Farmers and Merchants' Bank of Henry county, capital \$12,500, is reported incorporated by W. F. Alexander, J. E. Speight, J. J. Allman, W. A. Lovelace and C. L. Tansil.

Tex., Como.—An official letter says that the Merchants and Farmers' Bank will be incorporated with \$12,500 capital. J. J. Allman will be president.

Tex., Dallas.—Official: The United States Bond & Mortgage Co. incorporated; capital \$200,000. Business began at 259 Main St. March 1 with H. A. Kahler president, Alex. Sanger vice-president, Wm. G. Breg active vice-president, Sam P. Cochran, J. E. Cockrell, J. W. Everman, Edward Gray, H. D. Lindsley, Thos. B. Love, J. C. O'Connor, J. T. Treverant and C. Weichsel. R. S. Geen is secretary.

Tex., Dayton.—The Guaranty State Bank, capital \$10,000, is reported incorporated by W. T. Jamison, C. A. Brown, R. S. Sterling and others.

Tex., Galveston.—The First Texas State Insurance Co., recently chartered with \$25,000 capital, is reported to have elected directors thus: I. H. Kempner, chairman finance committee; B. J. Cunningham, president; A. C. Ford, Houston, vice-president; T. E. Flick, Galveston, secretary, and DeWitt C. Dunn of Houston.

Tex., Mertzon.—The First National Bank, capital \$30,000, is reported to have made application for a charter; directors, Fayette Tankersley, president; W. J. Carson, vice-president; D. F. Hughes, cashier; B. B. Hale, Louis L. Farr, G. W. Tankersley and W. W. Carson.

Tex., Mt. Pleasant.—Official: Mt. Pleasant

Building and Loan Association incorporated; mutual; incorporators, C. O. Lide, president; H. A. Willson, J. M. Burford, F. W. Vaughan, E. S. Lillienstern, M. F. Cotter and W. D. Sanders. Business began March 1.

Tex., San Saba.—The San Saba National Bank, capital \$25,000, is reported organized with directors thus: W. J. Moore, J. D. Estep and R. C. Sloan of San Saba, G. M. Smith of Kansas City and H. E. Moore and L. C. Smith of Llano.

Tex., Taylor.—The Bankers' Guarantee Life Insurance Co. is reported being organized with \$100,000 capital and \$100,000 surplus by A. Garwood & Co. It is said Robert J. Eckhardt will be president.

Tex., Waco.—The Amicable Life Insurance Co. of Texas, capital \$500,000, is reported organized with vice-presidents, J. D. Newton, C. C. Edwards, J. C. Boynton, L. C. Gibbs and M. L. Stallings; secretary and assistant actuary, A. Rand Wilson; treasurer, H. M. Minier; medical director, Dr. G. B. Foscoe; general attorney, Allan D. Sanford.

Va., Emporia.—The Planters' National Bank, capital \$25,000, has been approved. Directors, W. W. Green, J. R. Collier, C. L. Miller, J. R. Everett and D. T. Prince.

Va., Heathsville.—The Bank of Northumberland, capital \$15,000 to \$25,000, is reported incorporated by G. F. Eubanks, president; J. M. Boothe, vice-president; C. E. Sterling, secretary, and cashier.

Va., Norfolk.—Official: The Fidelity Savings & Trust Co. incorporated; capital \$300,000. Business began March 15 with directors thus: C. H. Terrell, president; Arthur J. Morris, vice-president; Jacob Rotholz, second vice-president; Sidney L. Nushaun, secretary and treasurer; B. R. Mann, W. F. Campbell, W. W. Robertson, J. H. Cafe, M. Whitehill, J. L. Bunting, Louis Mousbach, Nimmo Old, J. D. Levy, Chas. Hoofnagle, all of Norfolk.

Va., Saluda.—J. W. Penn of Roanoke, Va., denies the report that he has organized a bank at Saluda. L. E. Mumford, president of the L. E. Mumford Banking Co., Cape Charles, Va., confirms the report that a bank is to be organized.

Va., The Plains.—The Farmers' Bank reported incorporated; capital \$25,000 to \$50,000; R. S. Cochran, president; N. L. Turner, vice-president; Robert Murray, secretary.

W. Va., Bluefield.—An official letter says that the Washington Realty & Investment Co. has been organized with an authorized capital of \$100,000, the object of the company being to develop lots in Fairview Addition of Bluefield. S. M. Smith is interested.

W. Va., Fairmont.—The Mountain City Union Investment & Saving Co., capital \$5000, is reported incorporated by John H. Warner and others.

W. Va., Montgomery.—The Merchants' National Bank of Montgomery has been approved; capital \$25,000; organizers, J. S. Hill of Charleston, R. T. Hubbard, Jr., S. P. Campbell, Everett H. Morgan, George W. Brady and others.

W. Va., Princeton.—Official: The Princeton Guaranty & Title Co. incorporated; capital \$20,000; incorporators, H. W. Straley, Rose W. Straley, Sallie M. Straley, Mrs. Kate A. Mahood and Skye V. Straley, all of Princeton. Business is to begin about April 1.

NEW SECURITIES.

Ala., Birmingham.—Jefferson county will, it is stated, probably vote on another bond issue for good roads.

Ala., Decatur.—April 18 an election is to be held to vote on \$25,000 of city-hall, jail and fire-department 5 per cent. 30-year bonds.

Ala., Montgomery.—Steps are to be taken immediately, it is reported, to sell \$100,000 of 4 1/2 per cent. general indebtedness bonds. Ira H. Virgin is Mayor pro tem.

Ark., McGehee.—Official: The Desha Light, Water & Manufacturing Co. is completing arrangements for the sale of \$50,000 of 6 per cent. 20-year bonds. E. F. Curran is secretary.

Ark., Newport.—Bids will be received by the Board of Commissioners, Sewer District No. 1, C. G. Henry, secretary, until 2 P. M. March 21 for \$38,000 of 6 per cent. sewer bonds.

Ark., Warren.—Reported that R. D. Duncan of the State National Bank has purchased \$40,000 of Warren-Bradley county high-school bonds.

Fla., Arcadia.—An official letter says that the question of issuing \$300,000 of De Soto county road bonds has been withdrawn until August next.

Fla., Bonifay.—Reported voted: \$14,000 of schoolhouse bonds.

Fla., Jacksonville.—An official letter denies the report that new bonds are to be issued, and says no bonds have been issued since 1896 and no arrangements made for any new issue for the immediate future.

Fla., Kissimmee.—Official: Voted—\$43,000 of water-works and sewerage bonds. City Council is now ready to entertain proposals for their sale.

Fla., Kissimmee.—Reported voted: \$43,000 of water-works and sewerage bonds.

Fla., Marianna.—Official: Bids will be received until 8 P. M. April 4 for \$10,000 of 5 per cent. 20-year bonds; denomination, \$1000. Address F. G. Merritt, Town Clerk.

Fla., Sanford.—N. W. Harris & Co. of New York is reported to have been awarded at \$5400 premium and accrued interest \$120,000 of 6 per cent. 20-year paving, bridge, school and funding bonds.

Fla., West Palm Beach.—Official: Bids will be received by the Board of County Commissioners of Palm Beach County, F. E. Fenno, clerk, until noon March 18 for \$300,000 of 4½ per cent. 30-year road-improvement bonds; dated March 1, 1910.

Ga., Clarksville.—City is offering for sale \$8000 of 5 per cent. street-improvement bonds; due 30 years from 1908. Address The Mayor.

Ga., Dalton.—The election, which reports state will soon be held, is for the purpose of voting on \$20,000 of electric-light plant, \$30,000 of water-works improvement and extension, \$25,000 of school-building, \$30,000 of sewer-system and \$5000 of fire-department bonds.

Ga., Donaldsonville.—Reported that an election is to be held to vote on bonds for water and light plant.

Ga., Gainesville.—An official letter confirms the report that an election is to be held April 2 to vote on \$100,000 of 4½ per cent. 30-year bonds as follows: Water, \$70,000; light, \$5000; school-building, \$12,500; sewers, \$12,500. Bids will be asked as soon as possible after election. Address Mayor and Council.

Ga., Lafayette.—Reported voted: Bonds for water-works and electric-light plant.

Ga., Warrenton.—Bids will be opened at noon March 15 for \$20,000 of 5 per cent. Warren county road bonds. W. E. English is chairman Board of Commissioners of Roads and Revenues.

Ky., Clifton, P. O. Newport.—Official: John J. Hurley, Clerk, will receive bids until March 23 for \$12,000 of 5 per cent. 20-year Clifton (Campbell county) water bonds; denomination, \$100.

La., New Orleans.—Bids will be received by T. Wolfe, Jr., secretary Board Liquidation of City Debt, until noon April 12 for \$7,000,000 of 4 per cent. 18-32-year water, sewer and drainage bonds.

Md., Baltimore.—A bill has been introduced in the Legislature providing for \$500,000 of bonds for construction of new State normal school.

Miss., Fayette.—Official: Bids will be received by E. H. Reber, Town Clerk, until 8 P. M. April 5 for \$5000 of 6 per cent. 20-year bonds. J. E. Torrey is Mayor.

Mo., Charleston.—Official: Bids will be opened April 4 for \$5000 of 5 per cent. 15-19-year school repair bonds; denomination \$1000; dated April 4, 1910. Address W. C. Russell. Bonds amounting to \$20,000 for a new school building will be offered soon. W. A. Ogilvie is secretary Board of Education.

Mo., Joplin.—March 23 an election is to be held to vote on \$75,000 of school bonds.

Mo., Joplin.—March 23 an election is to be held to vote on \$75,000 of 4½ per cent. 10-20-year school bonds. Robert A. Wilson is secretary and clerk Board of Education.

Mo., Trenton.—April 5, it is stated, an election will be held to vote on \$40,000 of light plant bonds.

N. C., Andrews.—Official: February 15 town authorized the issue of \$20,000 of 6 per cent. 20-year electric-light and street-improvement bonds. Date of opening bids not yet fixed. Address W. B. Fisher, treasurer.

N. C., East Spencer, P. O. Spencer.—April 12, it is reported, an election is to be held to vote on \$25,000 of water-works bonds. Address Board of Aldermen.

N. C., Greensboro.—The \$35,000 of school bonds to be voted on April 26 are 30-year 5 per cents.; denomination \$1000. John S. Michaux is City Clerk.

N. C., Roxboro.—N. Lunsford, Mayor, writes that it is hoped to issue bonds for street improvement in the near future.

N. C., Ashboro.—Hal M. Worth, Mayor, writes that \$50,000 of 5 per cent. 30-year water-works and sewerage bonds have been declared a necessity by Town Council, and

bids will be asked when Supreme Court validates issue—possibly 60 days hence.

N. C., Franklin.—It is now stated that the election to vote on \$30,000 of 6 per cent. 30-year water-works and sewerage bonds will be held April 19. Fred L. Siler is Mayor and E. D. Franks, Clerk.

Okla., Altus.—Bids will be received until 6.30 P. M. April 11 for \$130,000 of 5½ per cent. water-extension, \$35,000 of 6 per cent. electric-light extension and \$35,000 of 6 per cent. sanitary-sewer 25-year bonds. Address Henry C. Gilliland, City Clerk.

Okla., Broken Arrow.—Official: The \$37,000 of water-works bonds have been purchased by the American Trust & Savings Co. of Springfield, O., at 5½ per cent. P. A. Fox is Clerk and E. W. Craig Mayor.

Okla., Medford.—Reported voted: \$18,000 of electric-light plant and \$12,000 of water-works bonds.

Okla., Sapulpa.—Official: October 26 Creek county authorized \$200,000 of 5 per cent. 10-25-year bridge bonds. Date of opening bids not yet decided. Address Abner Bruce, County Clerk.

Okla., Shawnee.—Application is to be made to the City Council. It is reported, to issue \$200,000 of boulevard bonds.

Okla., Willow.—Greer Bond & Investment Co. of Mangum, Okla., is reported to have purchased \$7500 of 20-year school bonds of district No. 72. W. J. Underwood is district clerk.

Okla., Enid.—An official letter confirms the report that bids will be opened March 14 for \$25,000 of water, \$25,000 of sewer and \$5000 of jail bonds; denomination, \$1000. Address C. F. Randolph, Mayor.

Okla., Muskogee.—An election is to be held in April. It is stated, to vote on \$50,000 of park bonds.

Okla., Sapulpa.—Bids will be received until 5 P. M. March 23 for \$350,000 of water, \$50,000 of sanitary-sewer and \$15,000 of fire apparatus 5 per cent. 20-year bonds. Address I. J. Anderson, City Clerk.

Okla., Tulsa.—An official letter says that March 7 an election was held to vote on \$280,000 of water, sewer, street and incinerating-plant bonds; denomination, \$1000. A press report says the election carried. It is stated that \$100,000 of city-hall and auditorium bonds were defeated.

Okla., Walters.—Reported voted: \$20,000 of city hall and courthouse bonds.

S. C., Sumter.—The Legislature is reported to have passed a bill authorizing Sumter county to issue \$50,000 of road and bridge bonds.

S. C., Union.—The Legislature is reported to have passed a bill authorizing Union county to issue \$75,000 of courthouse bonds.

Tenn., Jonesboro.—The Legislature is reported to have authorized Washington county to issue \$300,000 of road bonds.

Tenn., Lonsdale, P. O. Knoxville.—Reports state that M. M. Copenhaver, Mayor, will receive bids until April 1 for \$130,000 of street and school improvement bonds.

Tenn., Maryville.—An ordinance is reported passed by the City Council authorizing \$30,000 of 5 per cent. school bonds.

Tex., Abbott.—Reported that \$12,500 of school bonds have been voted.

Tex., Austin.—The Attorney-General has approved the following securities: \$10,000 of bonds of Matagorda county common school district No. 11; \$20,000 of Corsicana sewer bonds; \$10,000 of district No. 14, and \$7000 of district No. 30, Wheeler county, 5 per cent. 10-20-year school bonds.

Tex., Beaumont.—Official: Bids will be received until 10 A. M. April 6 by J. G. Sutton, City Secretary, for \$100,000 of school, 50,000 of sewer and \$10,000 of street-improvement 40-year bonds; denomination, \$1000; dated December 1, 1909. Bonds voted September 28, 1909.

Tex., Brady.—Official: February 21 city voted \$8000 of 5 per cent. 40-year ward-school building bonds. Address J. D. Hudson, president School Commissioners.

Tex., Burkburnett.—Reported voted: \$15,000 of school building bonds.

Tex., Brownsville.—Reported voted: \$30,000 of electric-light and water-plant bonds.

Tex., Beeville.—Official: May 2 an election will be held in Bee county to vote on \$75,000 of 4½ per cent. 10-40-year courthouse and \$300,000 of 4 per cent. 30-40-year road bonds. Bids will be opened after issue is authorized. County Judge Dodd will have charge. Dan Troy is County Clerk.

Tex., Canyon.—Reported voted: \$10,000 of high-school building bonds.

Tex., Celina.—Bonds for school building are reported voted.

Tex., Dallas.—Official: April 5 city will vote on \$550,000 of sewerage-disposal plant, \$100,000 of sanitary sewers, \$100,000 of school buildings, \$100,000 of city hospital, \$350,000 of street improvement and \$100,000 of water-works improvement bonds. S. J. Hay is Mayor.

Tex., El Campo.—Reported that \$4000 of 5 per cent. 10-20-year independent school district bonds are being offered.

Tex., El Paso.—The Western German Bank of Cincinnati, O., is reported to have purchased at \$4433 premium \$110,000 of street bonds.

Tex., El Paso.—The West German Bank of Cincinnati, Ohio, is reported to have purchased at \$4433 premium \$110,000 of street bonds.

Tex., Fort Worth.—April 7 an election is to be held to vote on \$100,000 of market-house and auditorium bonds.

Tex., Georgetown.—T. J. Lawhon, County Judge, confirms the report that bids will be opened March 16 for \$100,000 of 4½ per cent. 10-40-year Williamson county courthouse bonds; denomination, \$1000; dated April 10, 1910.

Tex., Killeen.—Reports state that \$15,000 of school-building bonds have been voted.

Tex., Lockney.—Reported that \$13,500 of school building bonds have been voted.

Tex., Lockhart.—An election is to be held April 11, it is stated, to vote on \$15,000 of city-hall and fire-station bonds.

Tex., Paris.—Bids will be received by E. H. McCuiston, Mayor, until April 15 for \$60,000 of street-improvement, \$30,000 of water-works and \$5000 of public-building 4½ per cent. 10-50-year bonds.

Tex., Pendleton.—Official: April 2 an election is to be held to vote on \$3000 of additional school bonds for common school district No. 66, Bell county. This district recently issued \$7000 of bonds for the same purpose. Hugh Harris is clerk of Bell county at Belton, Tex.

Tex., Plainview.—An official letter says March 26 city will vote on \$20,000 of school building and \$10,000 of city hall bonds.

Tex., Rotan.—Bids will be opened March 25 by J. C. Kirby, Mayor, for \$10,000 of city-hall and \$3500 of street-improvement 5 per cent. bonds. A previous report gave the date as March 5.

Tex., Sherman.—Official: Bids will be received by Barney C. Kreeger, City Secretary, until 7.30 P. M. April 4 for \$12,000 of 4½ per cent. 1-24-year water-works and \$8000 of 4½ per cent. 1-16-year street-improvement bonds; dated January 1, 1910. John C. Wall is Mayor.

Tex., Waco.—Official: March 22 bids will be opened for \$140,000 of public-school and \$35,000 of public-park 5 per cent. 30-year bonds; denomination, \$1000; dated January 1, 1910. Bonds were voted February 16, 1910. R. B. Dickey is City Secretary.

Tex., Water Valley.—Reports state that it is proposed to issue \$10,000 of school-district building bonds.

Tex., Weatherford.—April 5, it is stated, an election will be held to vote on \$15,000 of city hall and fire station bonds.

Tex., West.—Official: Bids will soon be asked for \$2000 of 5 per cent. 10-30-year school-building bonds voted February 23, 1910; denomination, \$500; dated March 1, 1910. Address M. Pasdrill, City Attorney. J. E. McGhee is Mayor.

Tex., Wichita Falls.—April 5 an election is to be held, it is reported, to vote on \$40,000 of school bonds.

Tex., Yorktown.—The election to vote on \$20,000 of 5 per cent. 30-year school building bonds will, it is said, be held April 5.

Va., Appalachia.—Reported that bids will be received by E. A. Collins, City Recorder, until 2 P. M. April 4 for \$14,000 of street, sewer and bridge and \$26,000 of water-works 5 per cent. 15-30-year bonds.

Va., Chatham.—Official: An act has been passed allowing a vote on \$7000 of street and \$3000 of public-school building bonds; time for election not yet named. J. H. Hargrave, Jr., is Mayor.

Va., Colonial Beach.—Reported voted: \$10,000 of street and other improvement bonds.

Va., Falling River, P. O. Lynchburg.—Reported that this district proposes to hold an election to vote on \$15,000 of high-school bonds.

Va., King George.—Reported that an election is to be held in King George county to vote bonds for courthouse.

Va., Manassas.—An election is to be held within 30 days, it is stated, to vote on \$30,000 of 40-year improvement bonds. Interest not to be less than 4 nor more than 6 per cent.

Va., Pulaski.—Reports state that the Board of Supervisors of Pulaski county has decided to issue \$70,000 of 5 per cent. 1-33-year road bonds.

W. Va., Huntington.—May 3 city will vote on \$50,000 of school-building, \$225,000 of 10-year street-improvement, \$75,000 of 30-year street-improvement and \$50,000 of 30-year city building bonds.

W. Va., Princeton.—Bids will be received by George W. Lazenby, Mayor, until noon March 31 for \$70,000 of street-improvement and \$30,000 of sewer 6 per cent. 10-34-year bonds.

At Fayette, Miss., bids will be received until 8 P. M. April 5 for \$5000 of 6 per cent. 20-year bonds. Further particulars will be found in the advertising columns.

At Marianna, Fla., bids will be received until 8 P. M. April 4 for \$10,000 of 5 per cent. 20-year municipal bonds. Further particulars will be found in the advertising columns.

At Sherman, Tex., bids will be received until 7.30 P. M. April 4, for \$12,000 of water-works and \$5000 of street improvement 4½ per cent bonds. Further particulars will be found in the advertising columns.

FINANCIAL NOTES.

The Bank of Plumerville, Ark., is reported to have increased its capital from \$15,000 to \$20,000.

The American National Bank of Richmond, Va., is reported to have increased its capital from \$400,000 to \$500,000.

The First National Bank of Eagle Lake, Tex., is reported to have increased its capital from \$40,000 to \$75,000.

The Citizens' National Bank of Raleigh, N. C., is reported to have acquired control of the Raleigh Savings Bank.

The Lowry National Bank of Atlanta, Ga., is reported to have decided to increase its capital from \$800,000 to \$1,000,000.

The Deposit Bank of Monroe County, Tompkinsville, Ky., is reported to have decided to increase its capital from \$25,000 to \$50,000.

The Independent Life Insurance Co. of America is reported to have filed an amendment to its charter, increasing its capital from \$300,000 to \$400,000.

The People's Fire Insurance Co. of Frederick County at Frederick, Md., has changed its name to the People's Fire Insurance Co. of Maryland. Capital may be increased from \$100,000 to \$200,000, and permission is given to increase it to \$1,000,000 later.

The First National Bank and the Globe Bank & Trust Co., both of Paducah, Ky., are to be consolidated, it is reported, under the name of the former institution; capital \$200,000. It is said the consolidation will take effect about April 15.

A condensed statement of 322 State banks in North Carolina at close of business January 31, 1910, shows total resources, \$57,383,689; capital paid in, \$7,853,527; surplus, \$1,927,527; undivided profits, \$682,339; total deposits, \$41,410,248.

The First National Bank of Earle, the Crittenden County Bank & Trust Co. of Marion and the Bank of Crittenden of Crawfordville, Ark., are reported consolidated under the name of the Crittenden County Bank & Trust Co., capital \$100,000, and will be operated at Marion. L. P. Berry is president.

A condensed statement of 358 State banks doing business in Tennessee at close of business December 31, 1909, shows total resources, \$91,254,636; loans and discounts, \$56,337,788; capital stock paid in, \$13,747,255; surplus and undivided profits (less expenses and taxes paid), \$4,783,440; individual deposits subject to check, \$48,332,156; certificates of deposit, \$8,641,031.

A condensed statement of 668 State banks in Oklahoma at close of business January 31, 1910, shows total resources, \$68,056,195; loans and discounts, \$38,497,530; due from banks, \$16,634,323; capital stock paid in, \$10,679,890; surplus fund, \$1,079,301; undivided profits, \$823,158; due to banks, \$4,142,777; individual deposits, \$49,928,744.

A condensed statement of 481 State banks and 59 bank and trust companies doing business in Texas at close of business January 31, 1910, shows: Total resources, \$74,586,974; loans, personal and collateral, \$34,352,674; loans, real estate, \$7,449,303; due from other banks, \$17,077,507; cash items, currency, specie and other resources, \$7,779,112; capital stock paid in, \$16,667,200; surplus fund, \$1,790,880; undivided profits, net, \$1,379,999; due to other banks, \$6,762,338; individual deposits, \$42,246,424; time and demand certificates of deposit, \$3,249,276.

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 Chattanooga and South Pittsburg, Tenn.;
 Atlanta, Ga.; Lowell, Mass.; East Orange,
 N. J., and Washington, D. C., until now
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 bonds are first lien on 7000 acres of the best
 coal properties in Tennessee, and \$75,000 of
 this money is being spent on an up-to-date
 coal works with a capacity of about 1000
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 T. K. SANDS, 2d Vice-President and Cashier.
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 it performs a required duty, and to this end
 offers the services of a live, progressive
 bank, conservatively managed.

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VIRGINIA-CAROLINA CHEMICAL CO.,
 Office of Treasurer,
 Richmond, Va., March 8, 1910.
 Dividend No. 58.

The Board of Directors have this day de-
 clared a dividend of TWO (2%) PER CENT.,
 the same being consecutive quarterly divi-
 dend No. 58 on the Preferred Stock of this
 Company, payable April 15, 1910, when checks
 will be mailed to all preferred stockholders
 of record at the close of business March 31,
 1910. The Preferred Stock Books will be
 closed from 3 P. M. on Thursday, March 31,
 1910, to 10 A. M. Saturday, April 16, 1910.
 S. W. TRAVERS,
 Treasurer.

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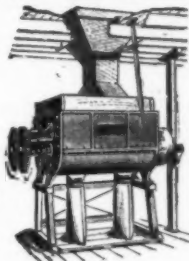


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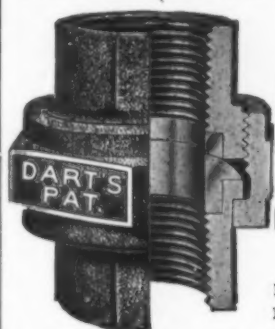
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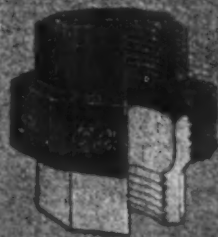
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NATIONAL TUBE COMPANY, 305 Frick Building, Pittsburgh, Pa.
Gentlemen: Won't you send me that copy of "THE WHOLE KEWANEE FAMILY" booklet which you have reserved for me?
Name..... City..... State.....
With what concern identified..... Are you now using "Kewanee" Unions?.....

NATIONAL TUBE CO. General Sales Offices, Frick Bldg.,
PITTSBURGH, PA.

Atlanta
Chicago

Denver
New Orleans

New York
Philadelphia

Pittsburgh
Portland

San Francisco
St. Louis

Salt Lake City
Seattle

Export Representatives: U. S. STEEL PRODUCTS EXPORT CO., New York City.

Classified Opportunities

AGENTS AND SALESMEN WANTED

AGENTS competent to represent manufacturers of a high-grade steam specialty, of which a large number have been sold, with plenty of testimonials to back them, will do well to reply to this; only those having experience selling steam specialties will be considered; orders taken on 30 days' trial; liberal commission and exclusive territory. Address B. Box 205, Detroit, Mich.

WANTED—Good live, practical men to sell the "Turbo Blower," the most efficient and up-to-date machine for producing mechanical draft. This is an item which can be used to advantage in any power plant; liberal commission allowed. We have still unassigned some good territory. Write for particulars, stating qualifications. Turbo Blower Co., Hudson Terminal, New York.

LIVE-WIRE SALESMEN calling on manufacturers' trade; large profits; small samples; quick sales. Fairfax Refining Co., Cleveland, Ohio.

AGENCY WANTED

WOULD like to correspond with manufacturers desiring representation in Birmingham and Northern Alabama; have represented Eastern manufacturers as Southern representative for past seven years. Address "J," P. O. Box 665, Birmingham, Alabama.

SITUATIONS WANTED

SOUTHERN COTTON-MILL MAN, familiar with both the business and practical ends of the business, is open for position as treasurer and manager, or assistant to treasurer and manager, of good Southern mill; 12 years' good experience; in present position five years as assistant to practical mill man managing one of the most successful mills in the South; highest references; correspondence solicited. Address No. 583, care Manufacturers' Record.

SALES MANAGER of a corporation selling to industrial plants and municipalities would like to make a change. Recognizing the rapid development of the South, would prefer to connect with a company selling in that section as sales manager or salesman; references. Address No. 590, care Manufacturers' Record.

CAPABLE, industrious, honest; 10 years' experience as superintendent and foreman sewer, water and sidewalk contracting; want permanent position with Southern contractor; would invest small amount cash to take some small contracts with right party. R. H. Brown, Sta. N., Baltimore, Md.

WANTED—Position as superintendent of lumbering operations or estimating standing timber; 15 years' experience; best of reference furnished as to ability, character, etc. Address Box 4, Marshlands, Pa.

COAL MINES superintendent-manager wants to communicate with firms intending to open up a new property; at present employed; excellent references; record furnished; broad experience; property must have a future. Address No. 588, care Manufacturers' Record.

YOUNG MAN with some capital desires position as office manager or bookkeeper with some manufacturing concern; several years' experience; best references furnished. Box 563, Huntington, W. Va.

HELP WANTED

WANTED—A cost keeper and inspector; a man who has had experience with straightening of iron, timekeeping and the handling of men; ten (10) hours a day; about \$70 per month, with advancement. Write fully regarding experience, age, etc., to L. G. W., care Jas. G. Wilson Mfg. Co., South Norfolk, Va.

WANTED—Superintendent for dimension stone quarry (granite); give reference and state salary expected. American Stone Co., Boscobel, Va.

EDUCATIONAL

RENSSELAER POLYTECHNIC INSTITUTE, TROY, N. Y.—Courses in Civil, Mechanical and Electrical engineering, and General Science, leading to the degrees of Civil Engineer (C.E.), Mechanical Engineer (M.E.), Electrical Engineer (E.E.), and Bachelor of Science (B.S.). Special courses in engineering and science. Splendidly equipped new engineering laboratories. Send for catalogues to Registrar.

BANKS

COMMERCIAL STATE BANK, Birmingham, Ala. State depository. Prompt attention to Alabama collections.

THE PALMETTO NATIONAL BANK, Columbia, S. C., capital \$250,000, solicits accounts of banks, firms, corporations and individuals either commercial or savings accounts.

BANK OF ENSLEY, Ensley, Ala., capital \$100,000, surplus and profits \$50,000. Individual responsibility more than a million dollars. Collect on made promptly.

Rate 20 cents per line per insertion. Minimum space accepted, four lines. Maximum space accepted, 24 lines. Allow seven words per line. Terms: Invariably cash with order; check, postoffice or express order or stamps accepted. No display type used. Questionable or undesirable advertisements will not be accepted. The assistance of our readers in excluding undesirable advertisements is requested. We reserve the right to refuse any advertisement. No patent medicine, whiskey or mining stock advertisements accepted. Rate for special contracts covering space used as desired within one year, as follows: 100 lines, 18c. per line; 300 lines 16c. per line; 500 lines or more, 15c. per line.

TYPEWRITERS

TYPEWRITERS—New, rebuilt and second-hand; all makes at lowest prices and guaranteed. Southern Typewriter & Supply Co., 229 West Fayette street, Baltimore, Md.

BUSINESS OPPORTUNITIES

INTEREST in well-established and prosperous foundry and machine shop, with large woodworking plant attached, in Southern city, for sale; equipped with new and up-to-date machinery; running on full time; want to retire from active business. Don't write unless you mean business and have money to invest. Bank references given and required. Purchase of stock carries control of company. Address No. 561, care Manufacturers' Record.

WANTED—Manufacturers' agents in all sections of the country to send us plans and specifications for estimates on slate and tile roofing, on a liberal commission arrangement. Address Kansas City Slate & Tile Roofing Co., 21st and Forest Ave., Kansas City, Mo.

LIST YOUR TIMBER with us; we can handle it, but we cannot undertake to sell it for an unreasonable price. If you make prices right we can find a buyer. Branchville Timber Co., Branchville, Va.

CASH FOR YOUR BUSINESS OR REAL ESTATE.—No matter where located, I bring buyers and sellers together. Write me today if you want to buy, sell or exchange any kind of property or business anywhere at any price. Advice and consultation free. Terms reasonable. Established 1881. Address Frank P. Cleveland, Real Estate Expert, 976 Adams Express Building, Chicago, Ill.

FOR SALE—In Newport News, Va., a growing city of 30,000 population, yearly pay-rolls about five million, with only one planing mill. We offer a fine plant for sash, doors, blinds and veneering; brick buildings; 14 lots on siding; cost \$22,000; former owner became entangled in outside deals; we will sacrifice for \$14,000; easy terms. Somerville Trust Co., Inc., Newport News, Va.

MANUFACTURING OPPORTUNITIES IN HARDWOOD.—I have for sale either entire or working interests in the following plants: Handle factory in good ash location, making hoe, fork and rake handles. Factory cutting "D" blanks and equipped for all kinds of dimension work, together with contract for output if desired. Good 25 M. capacity circular mill, with or without steel tram; up-to-date machinery and well equipped; no junk. Two large mill propositions with large tracts of hardwood timber. Good location for slack-barrel cooperage plant, with cheap timber; power and buildings if desired. Good band mill and veneer plant. These are all well located as to transportation, timber and labor. Correspondence from principals solicited. Jo A. Parker, Parma, Mo.

EAGLE PASS, TEXAS, proposes to build modern hotel; cost \$50,000 to \$75,000; local capitalists will subscribe half in cash; good hotel man wanted to promote the enterprise. Address Jos. O. Boehmer, Sec. Eagle Pass Industrial League.

FOR SALE—Well-equipped overall and back-band mill, ready to run; forced sale for liquidation of Couch-Elder Mfg. Co.; cost \$35,000; can be bought for \$15,000. Wanted—Party to take three-quarter interest and run mill; home people take other quarter. Write quick. C. P. Daniels' Sons, Senola, Ga.

WANTED—Party to take \$5000 to \$15,000 interest, together with position in management, in new modern manufacturing plant; most necessary and popular business; earned first season operated 50% of capital paid in; new associates taken on same basis as original stockholders for limited time. Address W. J. Edwards, Fourth National Bank Building, Atlanta, Ga.

PARTNER with \$15,000 to take half interest in manufacturing a new patented tried-out article; \$50,000 net can be made yearly; an exceptional opportunity. For particulars address J. S. Harlow, Mineral, Va.

WOULD like to hear of any small electrical plants in Southern States being offered for sale. Address No. 571, care Manufacturers' Record.

INVENTIONS protected. Patents investigated. Trade-marks registered. Hubert E. Peck, Pat. Atty., 629 F Street, Washington, D. C.

MANUFACTURERS of turbine water-power plants will please write W. Lauder, Yoakum, Texas, as he is wanting data on a plant he is expecting to build.

STORE AND OFFICE OUTFIT

FOR SALE—Store fixtures and office outfit in good condition; store fixtures, showcases, new ice box, cash register, shelving, etc., and office outfit of desks, chairs and safe; all in good condition. Address Chicago Lumber & Coal Co., St. Louis, Mo.

FIRE-ALARM SUPPLIES WANTED

YOAKUM, TEXAS, will put in a fire-alarm system. Communicate with D. J. Shall, Alderman, Yoakum, Texas.

WINTER RESORT

RED MINERAL SPRINGS, MT. PLEASANT, TEXAS, a delightful winter resort, boating, bathing and other outdoor amusements affording pleasant recreation. Red Mineral Springs water is especially valuable in cases of indigestion, stomach, kidney and bladder troubles; highly recommended by doctors and chemists; splendid hotel facilities. Red Mineral Springs Development Co., Mt. Pleasant, Texas.

HOTELS FOR SALE

FOR SALE—The Cambridge Hotel, Rocky Mount, N. C.; a three-story white brick, steam-heated hotel with all modern improvements; running water, telephone in every room; 40 bedrooms, all outside rooms, and furnished with first-class furniture and bedding, comparatively new; now doing a good business. Can be bought on easy terms. For further information write Rocky Mount Hotel Co.

BLUE SULPHUR INN, Cedar Bluff, Va., for sale. This hotel and summer resort is located on Clinch Valley Division of the N. & W. R. R., on a beautiful plot of ground containing two acres, in a bend of the Clinch River, and surrounded by almost perpendicular peaks and hills, making a very fascinating sight. Hotel has 31 large bedrooms, besides parlor, dining-room, office, sample-room, kitchen, bathrooms, halls, splendid porches, etc., and is so arranged that wings of any size can be built having a magnificent view from each room. It is lighted throughout with acetylene gas and has splendid spring water piped to the house. Property includes the famous Blue Sulphur Springs, with stone and concrete structure containing summer-house and billiard-room. The hotel has always made money and can be made one of the best hotel properties in the State. This is first time property has been on the market. For full information address E. V. Spotts, Tazewell, Va.

INDUSTRIES WANTED

CLAYWORKING PLANT

CLAYWORKERS WANTED.—Texarkana has clay for sewer pipe, pottery, fire brick, vitrified brick, at least six colors in face brick clay; natural gas for fuel; eight railroad outlets; two more railroads negotiating; \$250,000 to be spent on streets and roads this year. Our money will join yours. Come and be one of us. More local building in sight than our brick plants can supply. All Arkansas, Texas and Louisiana our market. For data address The Booster Club, Texarkana, Arkansas-Texas.

TILE AND SEWER PIPE PLANT

LOCATION FOR TILE AND SEWER-PIPE PLANT.—Good town on Seaboard Air Line Railway offers a material suitable for the manufacture of tile and sewer pipe; material, coal site in immediate proximity to each other, with good railroad facilities. Address J. W. White, General Industrial Agent, Seaboard Air Line Railway, Norfolk, Va.

FIRE BRICK

FIRE BRICK AND POTTERS' CLAY.—Excellent quality fire-brick clay, suitable for paving brick, fire brick, drain pipes and pottery; as good as any fire clay in the State; shipping facilities excellent; cheap fuel; plenty of good water; healthy country; labor plentiful; supply of clay inexhaustible. Refer to File No. 505. J. I. Hey, Auditor and Traffic Manager, Marshall & East Texas Railway, Marshall, Texas.

BRICK AND TILE WORKS

WANTED—Brick and tile works, Nelagony, Oklahoma; fine quality fire-brick, sewer tile, paving brick and pottery clay; on two trunk lines of railways; fuel gas furnished at three cents per 1000 cubic feet; plenty good water; inexhaustible supply of raw material; only 78 brick plants in the State and cannot supply the demand; location, including shale beds, gratis. Correspondence solicited. Address V. Lindstrom, Nelagony, Osage Co., Okla.

BRICK PLANT

YOAKUM, TEXAS, a large and rapidly-growing town and a splendid distributing point, wants a clay or sand-lime brick manufacturing plant. Large home demand for brick, as the town and surrounding towns are growing rapidly. Six brick buildings under course of construction in Yoakum now and estimates making on numerous others. Write Secretary Commercial Club, Yoakum, Texas.

GLASS FACTORY

ATLANTA, TEXAS, WANTS A GLASS FACTORY.—We have an unlimited quantity of glass sand that analyzes over 90 per cent. silica; natural gas in any quantity at satisfactory price; salt and lime manufactured close by; plenty of timber and water and other material; free site, free sand 20 years, exemption from city taxation 10 years, free artesian water to the first factory; transportation and rates all right. Write for full particulars on this and other factory proposition. Great opportunities. Cass County Industrial League, Atlanta, Texas.

COTTON MILLS

COLEMAN, TEXAS, wants a cotton mill located there, and wants to get in correspondence with people who can put it in and do the work. We are located in the center of a fine cotton-producing country and have good railroad facilities for handling the raw material and finished product. This county was twelfth in the production of cotton in the State of Texas in 1908. We can control from this and adjoining counties 250,000 bales and can get 400,000 if we go after it. Call on or address Coleman Commercial Club, Coleman, Texas.

ABILENE, TEXAS, wants a cotton mill; inexhaustible supply of pure water; steam coal at \$1.50 per ton; splendid shipping facilities; near the geographical center of the State; one-quarter million bales of cotton produced within a radius of 45 miles of the city last year. Address Abilene 25,000 Club, Box 537.

CANNING FACTORY

CANNING FACTORY.—Fine opening for a canning, preserving and pickle factory for canning all kinds of vegetables, putting up pickles and making catsups of various kinds, in town of 4500 population, with three trunk lines of railway, surrounded by fine farming lands producing all kinds of vegetables and many kinds of fruits, especially figs and oranges. Nothing of the kind here at present. Address Ten Thousand Club, Bay City, Texas.

CREAMERY

WAXAHACHIE, TEXAS, wants a creamery; has 10,000 population, and 30,000 in the county, with 1,275,000 within a radius of 100 miles; Ellis county produces more cotton than any other county in the world; with railroads radiating in five directions and reaching many populous cities; in the famous alfalfa belt of Texas; with an abundance of pure water, fine water-works and sewerage system; now spending \$250,000 on macadamized roads within a radius of 10 miles and leading into the city; with at least 1000 good milk cows to start on within a radius of five miles, and this number would possibly be quadrupled within a short time. Waxahachie has many beautiful homes, 10 church edifices; is the home of Trinity University; public high school affiliated with State University. To a competent, practical man, liberal inducements will be offered by the citizens of Waxahachie for the location of a good creamery here. Interested parties will receive full information by addressing Roy Connally, Sec'y, Waxahachie Com'l Club, Waxahachie, Texas.

ICE PLANT

ICE PLANT WANTED.—Itasca, Texas, the second largest town in Hill county; situated in the heart of the black-land belt of Central Texas; 15,000 population of well-to-do people in our trade territory to serve; abundance of pure artesian water on liberal terms; with free site and liberal subscriptions to stock, and every reasonable encouragement to experienced, practical man to build and operate a ten-ton ice plant. Address Board of Trade, Itasca, Texas.

HOTELS WANTED

YOAKUM, TEXAS, a large and rapidly-growing town, located midway between Houston on the east and San Antonio on the west, between Waco on the north and Corpus Christi on the south, surrounded by a rich, densely-populated agricultural country, with a high, healthy location, salubrious semi-tropical climate, an abundance of pure water, offers a splendid opening for a modern hotel. Such a hotel would get a large patronage from commercial travelers, who would spend the end of the week and Sunday here. Commodious opera-house being built in Yoakum now. Write Secretary Commercial Club, Yoakum, Texas.

MINERAL WELLS, TEXAS—One of America's greatest resorts for the treatment and care of people afflicted with Bright's disease, rheumatism, stomach, liver, kidney and bladder troubles; with 150,000 visitors annually; has sixty hotels and large boarding-houses now in operation. We need a modern hotel with from 300 to 500 rooms, built and equipped to cater to a high-class patronage, and we can show that such a hotel will pay. We wish to correspond with parties experienced in this line of endeavor desiring this kind of investment. Some capital could be interested. Address C. W. Wilson, President Commercial Club, Mineral Wells, Texas.

CAN FACTORY

WHY DON'T YOU manufacture shipping cans in Houston, Texas? Great opportunity; large quantities shipped in for local consumption; one plant alone consumes 100 carloads annually; other consumers are six coffee-roasting plants, two wholesale preserving plants and two wholesale drug houses; truck and fruit growers also large consumers. The right time to get in is now. Write for information to Adolph Boldt, Secretary Houston Business League, Houston, Texas.

